

OREGON ADMINISTRATIVE RULES
DEPARTMENT OF HUMAN SERVICES, PUBLIC HEALTH DIVISION
CHAPTER 333

DIVISION 535

NEW CONSTRUCTION AND ALTERATIONS OF EXISTING HOSPITALS

Building Requirements for General Hospitals

333-535-0000

Applicability

OAR 333-535-0000 through 333-535-0310 shall apply to all hospitals not licensed or for which plans have not been approved on the effective date of these rules for major alterations and new construction. Major alteration has the meaning given that term in OAR 333-500-0010.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0001

Referenced Codes and Standards

(1) The codes and standards referenced in these rules shall be considered part of the requirements of these rules to the prescribed extent of each such reference. Where differences occur between provisions of these rules and referenced codes and standards, the provisions of the most restrictive code shall apply.

- (a) 2007 Oregon Structural Specialty Code.
- (b) 2007 Oregon Mechanical Specialty Code.
- (c) 2008 Oregon Electrical Specialty Code.
- (d) 2008 Oregon Plumbing Specialty Code.
- (e) 2007 Oregon Fire Code.
- (f) National Fire Protection Association, NFPA 101 Life Safety Code, 2000 Edition.
- (g) National Fire Protection Association, NFPA 99 Standard for Healthcare Facilities, 1999 Edition.
- (h) National Fire Protection Association, NFPA 110 Standard for Emergency and Standby Power Systems, 2002 Edition.
- (i) National Fire Protection Association, NFPA 90A Standard for Installation of Air-Conditioning and Ventilating Systems, 1996 Edition.
- (j) National Fire Protection Association, NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking, 2008 Edition.
- (k) National Fire Protection Association, NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials, 2000 Edition.
- (l) National Fire Protection Association, NFPA 801 Standard for Fire Protection for Facilities Handling Radioactive Materials, 1998 Edition OSHA and radiology.
- (m) Illuminating Engineering Society, IES RP 28, 2007 Edition.
- (n) Illuminating Engineering Society, IES RP 29, 2006 Edition with Errata.

(o) American National Standards Institute/ American Society of Sanitary Engineering, ANSI/ASSE 6000, 2004 edition.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0010

General Rules

(1) When conditions make certain changes to existing institutions impractical to accomplish, minor variations from these requirements (other than fire and life safety requirements) may be permitted if the intent of the requirement is met, the care and safety of patients will not be jeopardized, and with written approval of the Department of Human Services, Public Health Division (Division). (Refer to OAR 333-500-0065.)

(2) Sizes: The sizes of various departments will depend upon program requirements and organization of services within the hospital. Some functions requiring separate spaces or rooms in these minimum requirements may be combined, provided that the resulting plans will not compromise the best standards of safety and of medical and nursing practices, and with written approval of the Division.

(3) Conflicts of requirements: Certain projects may be subject to the regulations of several different federal, state and local agencies. Should a difference in requirements occur, the more stringent requirement shall be applied. In cases of conflicting or opposing regulations, the problem shall be directed to the responsible programs for resolution.

(4) All departmental requirements included in these rules are not necessarily applicable to all institutions. Each service element provided in the hospital must, however, comply with requirements found herein.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0025

Medical/Surgical Patient Care Unit

Except as permitted under OAR 333-535-0010(1) or 333-500-0065, each patient care unit shall include the following:

(1) Patient rooms. Each patient room shall meet the following requirements:

(a) For new construction projects, maximum room capacity shall be two patients. For major alteration projects, the maximum room capacity shall be the present capacity or four patients, whichever is less.

(b) For new construction, patient rooms shall be constructed to meet the needs of the Functional Program and shall have a minimum of 100 square feet of clear floor area per bed in multiple bedrooms and 120 square feet of clear floor area in single patient rooms, exclusive of toilet rooms, closets, lockers, wardrobes, alcoves, or vestibules. The dimensions and arrangements of rooms shall be such that there is a minimum clearance of 3 feet around the perimeter of the bed and any wall or any other fixed obstruction. In multiple bedrooms, a clearance of 4 feet shall be available at the foot of each bed to permit the passage of equipment and beds, and 4 feet shall be provided between beds. Minor encroachments, including columns and hand washing stations, that do not interfere with function may be ignored when calculating required space. For renovation projects, every effort shall be made to meet the requirement set out in this subsection for new

construction. However, if full compliance is not practical for a renovation project, the Division may permit deviations from these requirements as long as patient rooms include at least 80 net square feet of clear floor area per bed in a multiple bedroom and 100 net square feet of clear floor area in a single patient room.

(c) Patient room windows:

(A) Operable windows are not required in patient rooms. If operable windows are provided, operable sections shall be designed to inhibit possible escape or suicide attempt.

(B) A minimum window area of 16 square feet shall be provided for each patient room. The maximum sill height shall be 3 feet above the finished floor. A minimum of 8 square feet of window shall be viewable by the patient from the bed. Walls and other non-moveable items shall not block the view of the window.

(C) Windows located in outside walls shall be 20 feet or more from another building or opposite wall and 10 feet or more from the property line except when the window faces on a street or public right of way of greater than 20 feet in width.

(D) For renovation projects where the exterior wall is being retained, windows shall be permitted to vary from the requirements of this subsection if approved by the Division.

(d) Hand-washing stations: A hand-washing station shall be provided serving each patient room. A hand-washing station shall also be located in each patient toilet room. For new construction, the patient room hand-washing station shall be located within the room and shall be situated for convenient access by staff and to prevent splash on patients. For renovation projects involving single patient rooms that have a private toilet room, a hand-washing station shall be located in either the toilet room or the patient room. Hand-washing stations shall comply with the requirements of OAR 333-535-0260.

(e) Patient toilet rooms: Each patient shall have access to a toilet room without having to enter the corridor. One toilet room shall serve no more than four beds and no more than two patient rooms. The toilet room shall contain a toilet, hand-washing station, and bathing facilities. Patient toilet rooms and central bathing facilities shall comply with the requirements of OAR 333-535-0260.

(f) Each patient shall have a separate wardrobe, locker, or closet suitable for hanging full-length garments and for storing personal effects within the room.

(g) Visual privacy from casual observation by other patients and visitors shall be provided for each patient. The design for privacy shall not restrict patient access to the entrance, hand-washing station, toilet, or nurse call system.

(2) Service areas. Provision for the services listed below shall be in or readily available to each patient care unit. The size and location of each service area will depend upon the numbers and types of beds served. Identifiable spaces are required for each of the indicated functions. Each service area may be arranged and located to serve more than one patient care unit but, unless noted otherwise, at least one such service area shall be provided on each nursing floor. Where the words "room" or "office" are used, a separate, enclosed space for the one named function is intended; otherwise, the described area may be a specific space in another room or common area.

(a) Administrative center(s) or nurses' station(s): This area shall include a desk, storage and work counters and shall have convenient access to a hand-washing station within 20 feet and not through a door, to meet infection control standards. It may be combined with or include facilities for reception and communication systems;

- (b) Private consultation/administrative office;
- (c) Charting facilities: Charting facilities shall have sufficient surface space to provide for charting by staff and physicians to meet the functional needs of the unit;
- (d) Toilet room(s) conveniently located for staff use (may be unisex);
- (e) Staff facilities: In addition to lounge facilities, securable closets or cabinet compartments shall be provided for the personal articles of nursing personnel. At a minimum, these shall be large enough for purses and billfolds. Coats may be stored in closets or cabinets on each floor or in a central staff locker area;
- (f) Multi-purpose room(s) for staff, patients, patients' families for patient conferences, reports, education, training sessions, and consultation. These rooms shall be accessible to each patient care unit but may be located on other floors if convenient for regular use;
- (g) Clean and soiled utility rooms shall be provided in accordance with OAR 333-535-0260(5);
- (h) Medication station: Provision shall be made for convenient and prompt 24hour distribution of medicine to patients. This shall be from a medicine preparation room, a self-contained medicine dispensing unit, or by another system approved by the Division. A medicine preparation room or unit shall be under the visual control of the nursing or pharmacy staff. It shall contain a work counter, hand-washing station, and an electrical receptacle for a lockable refrigerator and locked storage for biologicals and drugs. A secured medicine dispensing unit may be located at the nurses' station, in the clean utility room or area, or in an alcove or other space under the direct control of the nursing or pharmacy staff. This area shall have adequate lighting to easily identify drugs;
- (i) Clean linen storage: Each patient care unit shall contain a designated area for clean linen storage. This may be within the clean utility room or area, a separate closet, or a distribution system approved by the Division on each floor. If a closed cart system is used, storage may be in an alcove;
- (j) Nourishment area: There shall be a nourishment area with sink, work counter, refrigerator, storage cabinets, and equipment for hot and cold nourishments between scheduled meals. The nourishment area shall include space for trays and dishes used for non-scheduled meal service. Provisions and space shall be included for separate temporary storage of unused and soiled dietary trays not picked up at mealtime. A hand-washing station shall be in or immediately accessible from the nourishment area;
- (k) Ice machine: Each nursing unit shall have direct access to equipment to provide ice for treatments and nourishment. Ice-making equipment may be in the clean utility room or area or at the nourishment station. Ice intended for human consumption shall be from self-dispensing icemakers;
- (l) Equipment storage room(s) or alcove(s): Appropriate room(s) or alcove(s) shall be provided for storage of equipment necessary for patient care as required by the Functional Program, the location of which shall not interfere with the flow of traffic. Each patient care unit shall provide sufficient storage area(s) located on the patient floor to keep the required corridor width free of all equipment and supplies, but at least 10 square feet per patient bed shall be provided. If stretchers and wheelchairs are stored on the patient care unit, additional storage space shall be provided;
- (m) In remodel projects that do not include bathing facilities in all existing patient rooms, common use showers and bathtubs shall be provided in accordance with OAR 333-535-0260(6);

- (n) Emergency equipment storage: Space for emergency equipment such as cardiopulmonary resuscitation (CPR) carts shall be provided. This space shall be out of traffic, under the direct control of the nursing staff and proximate to the nurses' station;
 - (o) Housekeeping room: One housekeeping room shall be provided for each patient care unit or nursing floor. It shall be directly accessible from the patient care unit or floor and may serve more than one patient care unit on a floor. At least one housekeeping room per floor shall contain a service sink or floor receptor and space for the storage of supplies and housekeeping equipment and cart. A minimum of 35 square feet shall be provided for each housekeeping room. This housekeeping room shall not be used for other departments and patient care units that are specifically required by rule to have separate housekeeping rooms; and
 - (p) Low voltage room/closet(s), electrical room/closet(s) and other technical support spaces shall be provided as required to meet the service needs of the patient care unit.
- (3) Patient care units shall comply with the requirements of OAR 333-535-0260, 333-535-0270, 333-535-0280, 333-535-0300 and 333-535-0310. Additional rule requirements may apply to specialty patient care units.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0035

Infection Control Physical Requirements

- (1) An Infection Control Risk Assessment (ICRA) shall be provided for all projects that include Airborne Infection Isolation Rooms, Protective Environment Rooms, surgical facilities, emergency departments, hospital immediate care and minor emergency facilities, and any other identified areas of special risk related to infection. As used in division 535, an Infection Control Risk Assessment is documentation focusing on reduction of risk from infection. The assessment shall have input from the hospital's infection control personnel, and be based on current Centers for Disease Control guidelines or other applicable rules and guidelines. Each subject health care facility shall also comply with the requirements of OAR 333-505-0070. The Infection Control Risk Assessment shall include at least the following elements:
- (a) A statement explaining the needs and risks of the patient population to be served that includes:
 - (A) The number, location, and type of airborne infection isolation and protective environment rooms;
 - (B) Location(s) of special ventilation and filtration such as emergency department waiting and intake areas; and
 - (C) Air-handling and ventilation needs in surgical services, airborne infection isolation and protective environment rooms, laboratories, local exhaust systems for hazardous agents, and other special areas.
 - (b) Statements regarding infection control risk mitigation recommendations including:
 - (A) Patient placement and relocation;
 - (B) Standards for barriers and other protective measures required to protect adjacent areas and susceptible patients from air-borne contaminants;
 - (C) Temporary provisions or phasing for construction or modification of heating, ventilating, air conditioning, and water supply systems; and

- (D) Measures to be taken to train hospital staff, visitors, and construction personnel.
- (c) Management of potentially infectious patients that includes:
 - (A) Location of patients by susceptibility to infection and definition of risks to each; and
 - (B) Infection control risk mitigation recommendations that describe the specific methods by which transmission of air and waterborne biological contaminants will be avoided during the course of the construction project.
 - (d) Infection control risks during construction and plan for containment that includes:
 - (A) The impact of disrupting essential services to patients and employees;
 - (B) Location of known hazards;
 - (C) Determination of the specific hazards and protection levels for each;
 - (D) Assessment of external as well as internal construction activities; and
 - (E) Impact of potential outages or emergencies and protection of patients during planned or unplanned outages, movement of debris, traffic flow, cleanup, and testing and certification.
- (2) Airborne Infection Isolation Room(s): Airborne Infection Isolation Rooms are single occupancy patient care rooms where environmental factors are controlled in an effort to minimize the transmission of those infectious agents usually spread from person to person by droplet nuclei associated with coughing and inhalation. Airborne Infection Isolation Room requirements shall be predicated on the Infection Control Risk Assessment (ICRA) and the needs of specific community and patient populations served, and shall include the following:
 - (a) Each facility shall have at least one Airborne Infection Isolation Room. These rooms may be located within individual patient care units and used for normal acute care when not required for isolation cases, or they may be grouped as a separate isolation unit. The number of airborne infection isolation rooms for individual patient units shall be increased based upon an ICRA or by a multidisciplinary group designated for that purpose. Each room shall contain only one bed and shall comply with the requirements of OAR 333-535-0025, and ventilation requirements of OAR 333-535-0300.
 - (b) Each Airborne Infection Isolation Room shall have an area for hand-washing, gowning, and storage of clean and soiled materials located directly outside or immediately inside the entry door to the room.
 - (c) Airborne infection isolation room perimeter walls, ceilings, and floors, including penetrations, shall be sealed tightly so that air does not infiltrate the environment from the outside or from other spaces.
 - (d) Each Airborne Infection Isolation Room shall have a self-closing device on all room exit doors, or doors shall be signed "Door shall be closed at all times."
 - (e) A separate toilet, bathtub (or shower), and hand-washing station shall be required for each Airborne Infection Isolation Room and shall be accessible without having to enter the corridor.
 - (f) Each Airborne Infection Isolation Room shall have a permanently installed visual mechanism to constantly monitor the pressure status of the room when occupied by a patient with airborne infectious disease. The mechanism shall continuously monitor the direction of the airflow.
- (3) Protective Environment Room(s): Protective Environment Rooms are patient care rooms where severely immuno-suppressed patients are cared for (e.g. bone marrow transplant units). Protective Environment Rooms shall meet all rules for Airborne

Infection Isolation Rooms as required by subsection (2)(a) through (f) of this rule but shall provide positive air pressure relative to adjoining spaces, with all supply air passing through filters in compliance with OAR 333-535-0300. When determined necessary by an ICRA, special design considerations and air ventilation to ensure the protection of patients shall be required. The appropriate number and location of Protective Environment Rooms shall be determined by the ICRA. Each Protective Environment Room shall contain only one bed.

(4) Surgical facilities, emergency departments, immediate care and minor emergency facilities and other identified areas of special risk related to infection: Requirements shall be predicated on the ICRA in addition to the rules applicable to each type of area.

(5) Infectious waste:

(a) Soiled utility or soiled holding room(s) shall include segregated infectious waste storage and recycle storage if part of hospital operations unless a separate designated room for waste storage is provided.

(b) The infectious waste storage spaces shall have a floor drain, cleanable floor and wall surfaces, lighting and exhaust ventilation, and safe from weather, animals and unauthorized entry.

(c) Infectious waste management shall be in accordance with the requirements of OAR 333-056-0010 through 333-056-0050.

(d) Refrigeration requirements for such storage facilities shall also comply with OAR 333-535-0300 and the Oregon Mechanical Specialty Code.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0041

Critical Care Units

(1) Critical Care Units: Generally, Critical Care Units require special space and equipment considerations for effective staff functions. In addition, space must be arranged to include provisions for immediate access for emergency medical equipment from other departments. Critical Care Units shall comply in size, number and type with the requirements of this rule and with the hospital's Functional Program. This rule is intended for the more common types of critical care services. Where specialized services are required, the Division may allow such additions and modifications as are necessary for efficient, safe and effective patient care. (See also OAR 333-535-0300 for mechanical requirements and OAR 333-535-0310 for electrical requirements.)

(2) Adult Critical Care Units: Each Adult Critical Care Unit shall comply with the following requirements:

(a) The location shall be convenient for access from emergency, respiratory, laboratory, radiology, surgery, and other essential departments and services, and be located so that medical emergency resuscitation teams may respond promptly to emergency calls;

(b) The location shall be arranged to eliminate the need for through traffic;

(c) For new construction, a private room shall be provided for each patient. A minimum of 200 square feet of clear floor area shall be provided exclusive of anterooms, vestibules, toilet rooms, closets, lockers, wardrobes, and alcoves. A combined total of at least 7 feet of clear space shall be available at the head and foot of the bed. Minimum head wall width shall be 13 feet;

(d) Renovation projects shall comply with subsection (2)(c) of this rule except when existing structural conditions make full compliance impractical. In such cases, the Division may allow the following deviations: Private patient room size may be reduced to 160 square feet with a minimum headwall width of 11 feet 6 inches. The combined total of clear space available at the head and foot of the bed may be reduced to a minimum of 6 feet. Multiple bed rooms may be provided with cubicle curtains for patient privacy. The minimum patient cubicle size shall be 130 square feet with a minimum headwall width of 11 feet for each bed. Three of the 7 feet of combined total clear space required at the head and foot of the bed may be outside the curtained cubicle area;

(e) In private rooms or curtained cubicles, visual access to the corridor shall be provided. In multiple bed rooms, cubicle curtains or other alternative methods approved by the Division shall be provided for visual privacy from casual observation by other patients and visitors;

(f) Where only one door is provided to a bed space, it shall be at least 3 feet 8 inches in clear width and arranged to minimize interference with the movement of beds and large equipment. Sliding doors shall not have floor tracks and shall have hardware that minimizes jamming. When a secondary door is desired for staff use, it may be of a smaller width;

(g) For the purpose of allowing day from night orientation, newly constructed patient rooms shall include at least one window meeting the requirements of OAR 333-535-0025(1)(c), arranged to allow direct visual access by the patient to the outside. Patient rooms and cubicles in renovation projects shall also meet this requirement except when the Division determines that existing structural conditions make it impractical to do so. In these instances, patients must have direct visual access to an outside window, but it may be a clerestory type and the distance from the patient bed to the outside window may be up to 50 feet;

(h) A nurse call device shall be provided at each bed for patient use. A staff use emergency call station shall also be provided in each patient room to summon assistance. In multiple bed rooms, at least one such emergency call station shall be provided for each eight patient beds;

(i) Hand-washing stations shall be convenient to nurses' stations and patient bed areas. One hand-washing station shall be provided in each patient room. The hand-washing station shall be located near the entrance of the patient room, designed to minimize splashing water onto the floor, and shall be equipped with hands-free operable controls. In multiple bed rooms allowed under paragraph (2)(b)(D) of this rule, if the Division determines that existing structural conditions make it impractical to comply with this requirement, there shall be at least one hand-washing station provided for every two beds in multiple bed rooms. The hand-washing station shall be located near the entrances to patient cubicles;

(j) A toilet shall be provided within each patient room or in a separate private toilet room entered directly from the patient room. Space shall be provided adjacent to toilets to allow for staff assistance. An exception to this requirement may be granted by the Division when the project is within a Department of Human Services designated Level 1 Trauma Center Hospital and patients typically are unable to utilize toilets. In renovation projects if the Division determines that existing structural conditions make it impractical to comply with this paragraph, a minimum of one enclosed toilet room and hand-washing

station shall be provided for each eight patient beds. In these instances, portable toilets are permitted in place of fixed toilets within each patient room or cubicle. If portable toilets are used, facilities for cleaning and storing them shall be conveniently located within or adjacent to the Critical Care Unit;

(k) The nurses' station or a substation with space for charting, monitoring and a hand-washing station within 20 feet not through a door, shall be located so that nurses will have direct visual observation of each patient. In larger Critical Care Units, more than one nurses' station may be needed to provide for observation of all patients;

(l) Individual patient closets or lockers shall be provided for the secure storage of clothing and personal effects. This storage may be within patient rooms or in a central location convenient to the Critical Care Unit; and

(m) Each Critical Care Unit shall provide space for equipment used for continuous physiological monitoring, including a bedside and remote visual display for each patient.

(3) Airborne Infection Isolation Room: At least one Airborne Infection Isolation Room shall be provided for use by Critical Care Unit patients. The number and location of Airborne Infection Isolation Rooms shall be determined based upon an Infection Control Risk Assessment conducted in accordance with OAR 333-535-0035(1). Each Airborne Infection Isolation Room shall comply with the requirements of OAR 333-535-0035(2) with the following exceptions:

(a) The requirement for the bathtub or shower may be eliminated;

(b) Compact, modular toilet/sink combination units may replace the requirement for a toilet room if discussed and allowed through the ICRA; and

(c) Toilets may be eliminated entirely from patient rooms of Department of Human Services designated Level 1 Trauma Center Hospitals when patients typically are unable to utilize a toilet.

(4) Service areas: One service area may serve two or more adjacent Critical Care Units. The size and location of each service area will depend upon the number of beds to be served. The following service areas shall be located in, or readily available to, each Critical Care Unit:

(a) Charting facilities. Documentation and information review spaces shall be provided within the unit to accommodate the recording of patient information. The documentation space shall be located within or adjacent to the patient bed space. It shall include a countertop that will provide for a large flow sheet typical of critical care units and a computer monitor and keyboard. There shall be one documentation space with seating for each patient bed. There shall be a specifically designated area within the unit for information review located to facilitate concentration;

(b) Staff lounges and toilet(s). The following may be located outside the unit if conveniently accessible:

(A) Staff lounge(s) and toilet(s) shall be located so that staff may be recalled quickly to the patient area in emergencies;

(B) The lounge shall have telephone or intercom and emergency code alarm connections to the critical care unit it serves;

(C) Lounge facilities shall be sized in accordance with the Functional Program but shall not be less than 100 square feet; and

- (D) Staff personal effects storage. Space located at or near the nurses' work area for the secure storage of the personal effects of nursing personnel. If not provided elsewhere, provisions for the storage of coats, etc., shall be made in this area.
- (c) Sleeping and personal care accommodations shall be provided for staff on 24-hour call work schedules;
- (d) Clean utility or clean storage room. This room shall be provided in accordance with OAR 333-535-0260(4), for the storage and distribution of all clean medical and surgical supplies kept in the Critical Care Unit;
- (A) This room shall be immediately available in each critical care suite.
- (B) More than one critical care unit shall be permitted to share a clean utility or clean storage room provided direct access is available from each.
- (C) Such rooms shall be separate from and have no direct connection with soiled utility or soiled holding rooms.
- (D) If the clean utility room is used to prepare patient care items, it shall contain a work counter, a hand-washing station, and storage facilities for clean and sterile supplies.
- (E) If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, omission of the work counter and hand-washing station shall be permitted.
- (e) Clean linen storage. Location of the designated area within the clean utility room, a separate closet, or an approved distribution system on each floor shall be permitted. If a closed cart system is used, storage of clean linen carts in an alcove shall be permitted. The cart storage must be out of the path of normal traffic and under staff control;
- (f) Appropriate room(s) or alcove(s) shall be provided for storage of equipment necessary for patient care and as required by the Functional Program. Each unit shall provide sufficient storage area(s) located on the patient floor to keep its required corridor width free of all equipment and supplies, but not less than 10 square feet per patient bed shall be provided;
- (A) Equipment storage room or alcove. Appropriate room(s) or alcove(s) shall be provided for storage of large items of equipment necessary for patient care and as required by the Functional Program. Each Critical Care Unit shall provide sufficient storage area(s) in addition to subsection (4)(f) of this rule, located on the patient floor to keep its required corridor width free of all equipment and supplies, but not less than 20 square feet per patient bed shall be provided. Additional space shall be provided for stretcher or bed storage if stored on the floor.
- (B) Emergency equipment storage. Space shall be provided for emergency equipment that is under direct control of the nursing staff, such as a cardiopulmonary resuscitation (CPR) cart. This space shall be located in an area appropriate to the Functional Program but out of normal traffic.
- (g) Soiled utility room. Each patient Critical Care Unit shall include at least one soiled utility room that meets the requirements of OAR 333-535-0260(5);
- (h) Medication station. Medication stations shall be in accordance with the requirements of OAR 333-535-0025(2)(h). The medication station shall be designed to allow for secure, convenient, and prompt 24-hour distribution of medicine to patients;
- (i) Nourishment station. A nourishment station with sink, work counter, refrigerator, storage cabinets, and equipment for hot and cold nourishments between scheduled meals shall be provided. The nourishment station shall include space for trays and dishes used

for non-scheduled meal service. Provision and space shall be included for separate temporary storage of unused and soiled dietary trays not picked up at meal time. Nourishment stations shall not share storage, counters, sinks or refrigerator space with medical supplies or pharmaceuticals;

(j) Ice machine. Equipment to provide ice for treatments and nourishment shall be provided. Ice-making equipment may be in the clean work room or at the nourishment station. Ice intended for human consumption shall be from self-dispensing icemakers;

(k) Visitors' waiting room. A visitors' waiting room shall be provided that is designed to accommodate the long stays and stressful conditions common to such spaces, including provisions for privacy, means to facilitate communications, and access to toilets. The waiting room may be located outside the unit if conveniently accessible. The locations and size shall be appropriate for the number of patients and units served, with a seating capacity of not less than one family member per patient bed;

(l) Multipurpose room(s). Multipurpose room(s) shall be provided for staff, patients, and patient's families for patient conferences, reports, education, training sessions, and consultation. These rooms shall be accessible to each nursing unit; and

(m) Housekeeping room. A housekeeping room shall be provided within or immediately adjacent to the critical care unit. This room shall not be shared with other nursing units or departments. It shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment.

(5) Pediatric Critical Care Unit:

(a) If a facility has a distinct Pediatric Critical Care Unit, the Functional Program must include consideration for staffing, control, and the safe transportation of critically ill pediatric patients with life support and environmental systems from other areas of the facility. The Pediatric Critical Care Unit may be an open ward plan or may have private or semi-private patient rooms. Private rooms at the rate of at least one per 10 beds shall be provided. In addition, at least one private room for each Pediatric Critical Care Unit shall be provided for seclusion and airborne infection isolation. The room(s) provided for seclusion and airborne infection isolation shall comply with the requirements for Airborne Infection Isolation Rooms set forth in OAR 333-535-0035(2). (See also OAR 333-535-0300 for mechanical requirements and OAR 333-535-0310 for electrical requirements.)

(b) In addition to complying with the requirements of sections (1), (2), (3) and (4) of this rule, each Pediatric Critical Care Unit shall also include the following features:

(A) Space in the patient room for family and visitors. Sleeping space for parents who may be required to spend long hours with the patient. This sleeping space may be provided at the patients' bedside. If the sleeping area is separate from the patient area, a system for communication with Pediatric Critical Care Staff must be provided. Storage for associated bedding shall be provided;

(B) If an examination and treatment room is required by the Functional Program, it shall be located in or directly accessible from the Pediatric Critical Care Unit. Examination and treatment rooms shall have a floor area of at least 80 square feet and shall include a hand-washing station, storage facilities and a surface for charting;

(C) Provisions shall be made for the storage of formula or breast milk. Formula/breast milk storage may be outside the unit but should be available for use at all times. The

Functional Program should determine the location and size of formula/breast milk storage;

(D) Consultation/demonstration room within, or convenient to, the Pediatric Critical Care Unit for private discussions; and

(E) Separate storage cabinets or closets for toys and games.

(6) Newborn Intensive Care Units (NICU): Each Newborn Intensive Care Unit shall include or comply with the following requirements:

(a) The NICU shall have a clearly identified entrance and reception area with a counter for charting and enclosed storage for supplies. The area shall permit visual observation of, and contact with, all traffic entering the NICU. A hand-washing station shall be provided for visitors entering the NICU.

(b) The NICU shall be designed as part of an overall safety program to protect the physical security of infants, parents, and staff and to minimize the risk of infant abduction. There shall be controlled physical access and controlled egress to and from the NICU.

(c) In a multiple-bed room, every bed position shall be within 20 feet of a hands-free hand-washing station. Where an individual room concept is used, a hands-free hand-washing station shall be provided within each infant care room. All hand-washing stations shall be large enough to contain splashing.

(d) At least one door to each patient room in the NICU must be large enough in both width and height to accommodate portable X-ray and ultrasound equipment.

(e) The NICU shall be located proximate to Labor and Delivery Departments when that service is also provided at the facility.

(f) When viewing windows are provided, provisions shall be made to control casual viewing of infants. Each patient care space shall be designed to allow privacy for the infant and family.

(g) Noise control:

(A) Infant bed areas and the spaces opening onto them shall be designed to produce minimal background noise and to contain and absorb much of the transient noise that arises within the NICU;

(B) The combination of continuous background sound and transient sound in any patient care area shall not exceed an hourly Leq of 50dB and an hourly L10 of 55dB, both A-weighted slow response. The Lmax (transient sounds) shall not exceed 70dB, A-weighted slow response;

(C) Ceilings shall have a noise reduction coefficient (NRC) of at least 0.90; and

(D) The ceiling construction shall limit passage of particles from above the ceiling plane into the clinical environment. If a t-bar acoustic tile ceiling system is used, the tiles shall be clipped down, weighted or gasketed to limit passage of particles and be easily cleanable and non-friable.

(h) Lighting:

(A) Provisions shall be made for indirect lighting and high-intensity lighting in the NICU;

(B) Controls shall be provided to enable lighting to be adjusted over individual patient care spaces from one to 60 foot-candles at 3 feet above the floor level;

(C) Darkening sufficient for trans-illumination shall be available when necessary;

(D) No direct ambient lighting shall be permitted in the infant care space, and any direct ambient lighting used outside the infant care area shall be located or framed to avoid a

direct line of sight from any infant to the fixture. This does not exclude the use of direct procedure lighting; and

(E) Lighting fixtures shall be easy to clean.

(i) Space requirements: Each infant care space shall contain a minimum of 150 square feet per bassinet, excluding sinks and aisles. Each bassinet shall have a minimum clearance of 4 feet to walls or any permanent obstruction. When single infant rooms or fixed cubicle partitions are used, there shall be an adjacent aisle of not less than 8 feet in clear unobstructed width to permit passage of equipment and personnel. In multiple bed rooms, there shall be a minimum of 8 feet between infant care beds. Each infant care space shall be designed to allow privacy for the baby and family.

(j) A medication station meeting subsection (4)(h) of this rule.

(k) At least one Airborne Infection Isolation Room is required within the NICU. The room shall be enclosed and separated from other areas of the nursery with provisions for visual observation of the infant from adjacent nurseries or control area(s). All Airborne Infection Isolation Rooms shall comply with the requirements of OAR 333-535-0035(2), except that a separate toilet, bathtub, or shower are not required.

(l) Rooms at the rate of at least one per 15 infant isolettes shall be provided within the NICU to allow parents and infants to spend extended private time together.

(A) These room(s) shall have direct, private access to a hand-washing station and toilet facilities;

(B) Communication linkage with the NICU staff;

(C) Electrical and medical gas outlets as specified for other NICU beds;

(D) Sleeping facilities for at least one parent; and

(E) Sufficient space for the infant's bed and equipment.

(m) Lactation support space. Dedicated space shall be provided for lactation support and consultation in or immediately adjacent to the NICU. Provision shall be made, either within the room or conveniently located nearby, for a hand-washing station, counter, refrigerator and freezer, storage for pump and attachments, and educational materials.

(n) Charting facilities shall have adequate linear surface space to ensure that staff and physicians may chart and have simultaneous access to information and communication systems.

(o) A clean utility room or clean supply room shall be provided in accordance with the requirements of subsection (4)(d) of this rule.

(p) A soiled utility room or soiled holding room shall be provided in accordance with the requirements of subsection (4)(g) of this rule.

(q) A lounge, locker room, and staff toilet shall be provided within or adjacent to the NICU for staff use in accordance with the requirements of subsection (4)(b) of this rule.

(r) Space for storage of emergency equipment shall be provided in accordance with the requirements of paragraph (4)(f)(B) of this rule.

(s) A housekeeping closet directly accessible from the unit and dedicated for the exclusive use of the NICU shall be provided in accordance with the requirements of subsection (4)(m) of this rule.

(t) A visitors' waiting room shall be provided in accordance with the requirements of subsection (4)(k) of this rule.

(u) A nurses'/supervisors' office or station shall be provided in accordance with the requirements of subsection (2)(k) of this rule.

(v) Multipurpose room(s) for staff, patients, and patients' families for patient conferences, reports, education, training sessions, and consultation. These rooms must be accessible to each NICU. They may be located on other floors if convenient for regular use. One such room may serve several nursing units or departments.

(w) Equipment storage or alcove shall be provided in accordance with paragraph (4)(f)(a) of this rule.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0050

Pediatric Patient Care Unit

Young children and adolescents shall be housed in a patient care unit separate from adults or in a separate pediatrics room of a general nursing unit. This unit shall meet the following requirements:

(1) Patient rooms. The requirements noted in OAR 333-535-0025 shall be applied to a pediatric and adolescent care unit containing hospital beds or cribs, except that patient rooms used for cribs shall contain at least 60 square feet of clearance for each crib with no more than six cribs in a room.

(2) Nursery. Each nursery serving pediatric patients shall contain no more than eight bassinets. The minimum clear floor area per bassinet shall be 40 square feet. Each room shall contain a lavatory equipped for hand-washing, nurses' emergency calling system, and glazed viewing windows for observing infants from public areas and workroom.

(3) Nursery workrooms. Each nursery shall be served by a connecting workroom that shall contain:

(a) Gowning facilities at the entrance for staff;

(b) Work counter;

(c) Refrigerator;

(d) Storage facilities; and

(e) A hand-washing station.

(f) One workroom may serve more than one nursery provided that required services are convenient to each.

(g) The workroom serving the full-term and continuing care nurseries may be omitted if equivalent work and storage areas and facilities, including those for scrubbing and gowning, are provided within that nursery. Space required for work areas located within the nursery is in addition to the area required for infant care.

(h) Provision shall be made for storage of emergency cart(s) and equipment out of traffic.

(i) Provision shall be made for the sanitary storage and disposal of soiled waste.

(j) Visual control shall be provided via borrowed lights or view panels between the staff work area and each nursery.

(4) Examination/Treatment Rooms. An examination/ treatment room shall be provided for pediatric and adolescent patients. A separate area for infant examination and treatment shall be permitted within the pediatric nursery workroom. It shall contain a work counter, storage facilities, and a hand-washing station. Examination/treatment rooms shall have a minimum floor area of 120 square feet.

(5) Service areas. The service areas in the pediatric and adolescent nursing unit shall conform to the conditions listed in OAR 333-535-0025 and shall meet the following additional conditions:

- (a) Multipurpose or individual room(s) shall be provided within or adjacent to areas serving pediatric and adolescent patrons for dining, educational and developmentally appropriate play and recreation, with access and equipment for patients with physical restrictions. Insulation, isolation, and structural provisions shall be made to minimize the transmission of impact noise through the floor, walls, or ceiling of the multipurpose room(s).
 - (b) Space for preparation and storage of infant formula or breast milk shall be provided in the unit or other convenient location. The Functional Program should determine the location and size of formula/breast milk storage. Provisions shall be made for continuation of special formula that may have been prescribed for the infant prior to admission or readmission.
 - (c) Patients' toilet room(s) with hand-washing stations in each room, in addition to those serving bed areas, shall be convenient to multipurpose room(s) and to each central bathing facility.
 - (d) Storage closets or cabinets shall be provided for toys, and educational and recreational equipment.
 - (e) Storage space shall be provided to permit exchange of cribs and adult beds.
 - (f) Storage space shall be provided for equipment and supplies (including cots, recliners, extra linen, etc.) for parents who stay with the patient overnight.
 - (g) Separate clean and soiled utility or holding rooms shall be provided in accordance with OAR 333-535-0260(4) and (5).
 - (h) Housekeeping closet shall be provided for each nursery per OAR 333-535-0260(8).
- Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0061

Psychiatric Patient Care Units and Rooms

(1) The design of inpatient psychiatric patient care units shall be supportive of the types of psychiatric therapies provided for patients and their psychiatric care needs. Interior finishes, lighting and furnishings shall, to the extent practicable, reflect a residential rather than an institutional setting with an emphasis on natural light and exterior views while not compromising patient privacy and safety design. Inpatient psychiatric patient care units shall include patient rooms meeting the requirements of section (4) of this rule and service areas meeting the requirements of section (5) of this rule.

(2) Patient and Staff Safety Assessment. The hospital psychiatric care staff and the hospital administration, in consultation with the project architects, shall develop a Patient and Staff Safety Assessment that addresses security and safety design features and devices. A copy of this Assessment shall accompany construction documents submitted to the Licensing Plans Review Program. The Patient and Staff Safety Assessment shall include at least the following elements:

- (a) A statement explaining the psychiatric population groups served;
- (b) A discussion of the capability for staff visual supervision of patient ancillary areas and corridors;

- (c) A discussion of the risks to patients, including self-injury, and the project solutions employed to minimize such risks;
 - (d) A discussion of building features and equipment, including items which may be used as weapons, that is intended to minimize risks to patients, staff and visitors;
 - (e) A statement explaining how potentially infectious patients will be managed; and
 - (f) A discussion of outdoor areas used by patients. Discussion must include, but is not limited to, the number of patients each outdoor area will serve at one time, staffing, security and shifts.
- (3) Except as permitted under OAR 333-500-0065, every hospital classified as mental or psychiatric and other hospitals, regardless of classification, that provide psychiatric services, shall have at least one psychiatric holding room which meets the requirements of section (7) of this rule and OAR 309-033-0720(3)(e).
- (4) Psychiatric patient care rooms shall comply with the requirements of OAR 333-535-0025, except as follows:
- (a) A nurse call system is not required. If included, provisions shall be made for easy removal or covering of call buttons;
 - (b) Patient toilets shall not have bed pan flushing devices;
 - (c) Hand-washing stations are not required in patient rooms;
 - (d) Visual privacy in multi-bed rooms (e.g., cubicle curtains) is not required;
 - (e) Each patient room shall be provided a private toilet room and hand-washing station. Grab bars are only required in rooms required to be accessible to the disabled;
 - (f) All hardware shall have tamper-resistant fasteners; and
 - (g) Patient rooms shall comply with the requirements of section (6) of this rule.
- (5) Psychiatric patient care unit service areas shall comply with the requirements of OAR 333-535-0025, except as follows:
- (a) A secured storage area shall be provided for patients' belongings that are determined to be potentially harmful;
 - (b) A secured storage station will be provided for storing law enforcement weapons prior to officers entering the patient care unit;
 - (c) The medication station shall include provision against unauthorized access;
 - (d) Between meal nourishment(s) facilities within the unit shall be one, or a combination of the following:
 - (A) A nourishment station;
 - (B) A kitchenette, designed for patient use, with a sink and a keyed switch or other acceptable method for staff control of any heating and cooking devices; or
 - (C) A kitchen service within the unit that includes a hand washing station, storage space, refrigerator and facilities for full meal preparation. A keyed switch or other acceptable method for staff control of any heating and cooking devices is required.
 - (e) All storage spaces within the psychiatric patient care unit shall be secured from patient access;
 - (f) A bathtub or shower shall be provided for every six beds not otherwise served by bathing facilities within the patient rooms. Bathing facilities shall be designed and located for patient safety, convenience, privacy and shall comply with section (6) of this rule;
 - (g) A separate charting area shall be provided with provisions for visual and acoustical privacy. Viewing windows to permit observation of patient areas by the charting nurse or

physician may be used if the arrangement is such that patient files cannot be read from outside the charting area. Viewing windows shall meet the requirements of subsection (6)(g) of this rule;

(h) At least two separate social spaces, one appropriate for noisy activities and one for quiet activities shall be provided. The combined area shall be at least 40 square feet per patient with each space being at least 120 square feet in size. These spaces may be shared by dining activities;

(i) Space for group therapy shall be provided. This space may be combined with the quiet space required by subsection (5)(h) of this rule when the unit accommodates 12 or fewer patients and when at least 225 square feet of closed private space is available for group therapy activities;

(j) Securable patient laundry facilities with an automatic washer and dryer and secured space for chemicals shall be provided;

(k) Each psychiatric patient care unit shall include, or have close access to, a soiled utility room that meets the requirements of OAR 333-535-0260(5) or a soiled holding room. A soiled holding room shall meet all the requirements of a soiled utility room except that a clinical sink may be omitted;

(l) The following elements shall also be provided, but shall be permitted to serve several nursing units and may be on a different floor if conveniently located to the unit for routine use:

(A) Space requirements. Examination rooms shall have a minimum floor area of 120 square feet, excluding space for vestibule, toilets, and closets. The room shall contain a hand-washing station, storage facilities and a surface for charting. In existing psychiatric facilities exam rooms may continue to be 80 square feet excluding space for vestibules, toilets and closets;

(B) Separate consultation room(s), lockable from the outside. Each consultation room shall have a minimum floor space of 100 square feet and shall be provided at a room-to-bed ratio of one consultation room for every 12 psychiatric beds. The room(s) shall be designed for acoustical and visual privacy and be constructed to achieve a level of voice privacy of 50 STC;

(C) Separate space for patient therapy/multipurpose use. The greater of at least 300 square feet or at least 15 square feet per patient shall be provided. The space shall include a hand-washing station, work counter(s), storage and space for displays and may serve more than one psychiatric patient care unit. However, when a psychiatric patient care unit contains less than 12 beds, the therapy and other functions may be performed within the noisy activities area required by subsection (5)(h) of this rule if at least an additional 10 square feet per patient is provided; and

(D) A conference and treatment planning room, for use by psychiatric patient care unit staff, constructed to achieve a level of voice privacy of 50 STC.

(m) Outside area shall be provided for all patients. The area shall be discussed as part of the Functional Program per subsection (2)(f) of this rule.

(6) Patient and staff safety features, security and safety devices shall not, to the extent practicable, be presented in a manner to attract or invite tampering by patients. Design, finishes and furnishings shall be designed and installed to minimize the opportunity for patients to cause injury to themselves or others. Special design considerations for prevention of self injury and injury to staff and others shall include:

- (a) Visual control of nursing unit corridors, passive activity areas and outdoor areas shall be provided;
- (b) Hidden alcoves are prohibited;
- (c) Non-patient areas, including staff support rooms, mechanical and electrical spaces shall be secured from patients;
- (d) Door closers and door and cabinet hardware, including hinges in patient areas, shall be designed to prevent attachment of other articles and to limit possible patient or staff injury;
- (e) Doors to patient toilet and shower rooms shall not swing into the room. These doors shall either not be lockable from within the room or shall be provided with privacy locks that can be opened by staff with a key or tool. Hardware shall be designed to preclude patients from tying the door closed;
- (f) Furnishings, movable equipment and accessories shall be addressed by the Patient and Staff Safety Assessment required by section (2) of this rule;
- (g) Windows, including interior and exterior glazing, shall be non-operable and shall be of break-resistant material (i.e., will not shatter). Window sills, curtains and blinds shall be constructed to prevent attachment of other articles;
- (h) Curtains and blinds shall be constructed to break-away with a vertical load of greater than 40 pounds;
- (i) Ceilings in patient bedrooms, toilet and shower rooms shall be of continuous bonded construction. T-bar ceilings with lay-in tiles are not allowed;
- (j) The ceiling and air distribution devices, lighting fixtures, sprinkler heads, smoke detectors, and other appurtenances shall be designed and installed to be tamper resistant, non-breakable, prevent the attachment of other articles and to limit possible patient or staff injury in patient rooms, toilet and shower rooms;
- (k) Flooring base in patient rooms, toilet and shower rooms shall be installed to preclude removal by patients;
- (l) Shower, bath, toilet and sink plumbing fixture hardware and accessories, including grab bars and toilet paper holders, shall prevent attachment of other articles and removal by patients. Shut-offs under patient sinks shall be covered and secured to prevent patient access;
- (m) Grab bars, if provided, shall be contiguous to the wall so that nothing can pass between the edge of the rail and the wall;
- (n) Toilet flush valves shall be recessed or of the push button type;
- (o) Hand-washing station faucet hardware shall be recessed or of the push button type to preclude patient or staff injury;
- (p) Shower curtains, if provided, shall have a breakaway maximum of 40 pounds and be supported on curtain tracks attached or flush to the ceiling. Shower curtains shall not be permitted where facilities accommodate children whose weight is close to, or within the breakaway weight limits;
- (q) Shower heads shall be sloped or otherwise designed to prevent attachment of other articles;
- (r) Fire extinguisher cabinets and fire alarm pull stations shall be located or installed to prevent inappropriate use;
- (s) Electrical outlets in patient areas shall be of a ground fault interrupter type ("GFI") or shall be protected by GFI breakers at electrical panels;

- (t) Patient mirrors shall be non-breakable and shatterproof;
 - (u) Medical gas outlets, if provided, shall be located or installed to prevent patient access;
 - (v) All devices attached to walls, ceilings and floors and all door and window hardware shall be tamper resistant and be securely fastened with tamper proof screws;
 - (w) All exit door hardware shall have concealed rods, if any are used, and they shall not be removable by patients. Door closure and panic bars, if provided, shall not allow attachment of other articles;
 - (x) Time delay closers shall not be used on locked doors; and
 - (y) Outdoor areas shall be secured in accordance with the Patient and Staff Safety Assessment required by section (2) of this rule.
- (7) Psychiatric Holding Rooms. Psychiatric holding rooms shall comply with the following requirements:
- (a) As required by section (3) of this rule, and except as permitted by OAR 333-500-0065, each hospital classified as general or psychiatric shall have at least one psychiatric holding room. A minimum of one psychiatric holding room is required for every 24 psychiatric beds or fraction thereof. The rooms shall be proximate to a nurses' station. Each room shall be for only one patient and shall be at least 80 square feet in size. The design of the room shall prevent patient hiding and minimize the potential for escape and self injury;
 - (b) Psychiatric holding rooms shall meet the requirements of section (6) of this rule;
 - (c) Outside room corners, door hardware protrusions and other projections shall be avoided to minimize points for possible patient injury;
 - (d) No items shall be attached to the walls and there shall be no exposed curtains, drapes, rods or furniture, except a portable bed which can be removed if necessary. Beds that are securely fastened to the floor are allowable but must have no sharp protrusions, such as bed posts or corners;
 - (e) Wall and other room finish materials shall be securely constructed to resist attempts at intentional damage;
 - (f) Exposed pipes or electrical wiring is prohibited. Electrical outlets, if provided, shall be permanently capped or covered with a metal shield that opens with a key and shall be circuited and controllable from outside the room. Ceiling lights shall be unbreakable and shall be either recessed or surface mounted;
 - (g) Room construction shall contain no readily combustible materials (i.e., wood or vinyl wall covering surfaces). If the room interior is padded with combustible materials, such materials shall meet the requirements of the National Fire Protection Association (NFPA) 101 Code as enforced by the State Fire Marshal;
 - (h) Sprinkler heads shall be of a recessed pop-down type and shall have a breakaway strength of under 80 pounds;
 - (i) A toilet and hand-washing station that meets the requirements of section (6) of this rule shall be available for patient use but shall not be located within the room;
 - (j) The door to the room shall open outward and shall include a viewing window of shatterproof glass or plastic through which the entire room may be viewed from the outside before entering; and
 - (k) The door to the room shall be lockable from the outside and shall include tamper-proof hardware. The lock must release with initiation of the fire alarm, sprinkler flow or power failure as required for controlled egress in accordance with the Oregon Structural

Speciality Code and NFPA 101 Code as enforced by the appropriate building codes agency and fire marshal.

(8) Child and Adolescent Psychiatric Units. The requirements of sections (1) through (6) of this rule, and of section (7) of this rule if a psychiatric holding room is provided, shall apply to child and adolescent psychiatric units, except as follows:

(a) The environment of the unit shall reflect the age, social and developmental needs of children and adolescents, including space to accommodate family and other caregivers;

(b) At least one single occupancy timeout room shall be provided;

(c) An outdoor activity area shall be provided with a minimum of 50 square feet per patient but not less than 400 total square feet;

(d) Child and adolescent care units shall be physically and visually separate from one another and from adult care units; and

(e) Showers. Shower curtains shall not be permitted in child adolescent care units.

(9) Geriatric, Alzheimer and Other Dementia Units. The requirements of sections (1) through (6) of this rule, and of section (7) of this rule if a psychiatric holding room is provided, shall apply to geriatric, Alzheimer and other dementia units, except as follows:

(a) Single patient rooms shall be at least 120 square feet in size. Multiple patient rooms shall provide at least 80 square feet per patient exclusive of closets, vestibules and bathroom facilities and allow for a minimum of 3 feet between beds;

(b) A nurse call system meeting the requirements of section (6) of this rule shall be provided. Provisions shall be made for the removal or covering of call button outlets as required by the Patient Safety Assessment. Call cords or strings in excess of six inches shall not be permitted;

(c) Handrails shall be provided on both sides of corridors used by patients. These handrails shall be contiguous with the wall so that nothing may pass between the rail and wall;

(d) Doors to patient rooms and patient ancillary use areas shall be a minimum of 3 feet 8 inches in clear width;

(e) Slip resistant flooring surfaces shall be provided in all bathing rooms; and

(f) Secure storage for wheelchairs shall be provided in a location readily accessible to the unit.

(10) Forensic Psychiatric Units. The requirements of sections (1) through (6) of this rule shall apply to forensic psychiatric units, except as follows:

(a) Security vestibules or sally ports are required at the unit entrance;

(b) Additional treatment areas, police and courtroom space, and special security considerations shall be provided in accordance with the Patient and Staff Safety Assessment; and

(c) Children and adolescents shall be separated from one another as defined by the Functional Program. Children and adolescents shall also be physically and visually separate from adult care units.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0065

Detoxification Rooms

(1) In hospitals that provide drug or alcohol detoxification services, a minimum of one patient room for detoxification, located to allow direct observation by nursing staff, shall be provided.

(a) Windows in detoxification rooms shall be of a security type that can only be opened by keys or tools that are under the control of the staff.

(b) An adjoining or closely available toilet room and a hand-washing station serving detoxification patients only is also required.

(2) All secured portions of the detoxification facility must comply with the Group I, Division 2 occupancy classification requirements in accordance with the Oregon Structural Specialty Code.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0070

Newborn Nursery Units

(1) General. Newborn infants not cared for in a "rooming in" program in post-partum or LDR rooms, shall be housed in nurseries that comply with the standards below. Location shall allow for transfer of infants to post partum and birthing and LDR rooms without going through unrelated departmental or public corridors and spaces. The nursery shall be located and arranged to preclude the need for non-related pedestrian traffic. No nursery shall open directly into another nursery. See OAR 333-535-0050(2) for pediatric nurseries. See OAR 333-535-0041(4) for neonatal intensive care nurseries. Refer to mechanical and electrical sections for ventilation, oxygen, suction, medical air and electrical standards. All nurseries shall contain the following:

(a) At least one hand-washing station for each eight infant beds equipped with controls that can be operated without use of hands.

(b) Nurses' emergency calling system to summon assistance without leaving the patient area. Alternate technologies shall be permitted for emergency or nurse call systems. If radio frequency systems are utilized, consideration shall be given to electromagnetic compatibility between internal and external sources. Refer to OAR 333-535-0310, Electrical Requirements.

(c) Glazed observation windows to permit viewing infants from public areas, from workrooms, and from adjacent nurseries.

(d) Provisions shall be included for storage and convenient access at each nursery room for linens and infant supplies.

(2) Full-Term Nursery. Each full-term nursery shall contain no more than 16 standard infant stations. The minimum floor area shall be 24 square feet for each infant station exclusive of auxiliary work areas. When a "rooming-in" program is used, the total number of bassinets provided in these units may be appropriately reduced, but the full-term nursery may not be omitted in its entirety from any facility that includes obstetrical services. (When facilities use a "rooming-in" program in which all infants are returned to the nursery at night, a reduction in nursery size may not be practical.)

(3) Continuing Care Nursery. Hospitals having 25 or more maternity beds shall have a separate nursery that provides continuing care for infants who need close observation. The minimum floor area per infant shall be 50 square feet, exclusive of auxiliary work areas, with provisions for at least 4 feet between and at all sides of bassinets. The

Division, however, may waive this requirement for low-risk obstetrical services in service areas where a second, full service nursery exists, and a safe method for transfer is in place and discussed in the Functional Program.

(4) Charting Facilities. Charting facilities shall have linear surface space to ensure that staff and physicians may chart and have simultaneous access to information and communication systems.

(5) Nursery workrooms. Each nursery shall be served by a connecting workroom that shall contain:

(a) Gowning facilities at the entrance for staff;

(b) Work counter;

(c) Refrigerator;

(d) Storage facilities; and

(e) A hand-washing station.

(f) One workroom may serve more than one nursery provided that required services are convenient to each.

(g) The workroom serving the full-term and continuing care nurseries may be omitted if equivalent work and storage areas and facilities, including those for scrubbing and gowning, are provided within that nursery. Space required for work areas located within the nursery is in addition to the area required for infant care.

(h) Provision shall be made for storage of emergency cart(s) and equipment out of traffic.

(i) Provision shall be made for the sanitary storage and disposal of soiled waste.

(j) Visual control shall be provided via borrowed lights or view panels between the staff work area and each nursery.

(6) Examination and Treatment Room or Space for Infants. Such areas, when required by the Functional Program shall contain a work counter, storage, and a hands-free hand-washing station. Exam and Treatment space may be located within the nursery workroom.

(7) Isolation Nursery. A separate isolation nursery is required unless other provision for the isolation of infants who are suspected of being infectious is made and included in the hospital's infection control policy.

(8) Infant Formula Facilities. Where infant formula is prepared on site, direct access from formula preparation room to any nursery room is prohibited. The room must include clean-up washing and sterilization facilities, separate facilities for formula preparation, and refrigerated storage and warming facilities. If commercial infant formula is used, storage and handling may be done in the nursery workroom or other appropriate room in the hospital that is accessible at all hours. The preparation area shall have a work counter, a hand-washing station, and storage facilities.

(9) Housekeeping Closet. In hospitals with continuing care nurseries, a housekeeping closet directly accessible from the unit and dedicated for the exclusive use of the Newborn Nursery, containing a floor receptor or sink and storage space for housekeeping equipment and supplies, shall be provided.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0080

Emergency Department

(1) General. Hospitals offering emergency patient care services shall include facilities required under section (2) of this rule. If outpatient clinical services are to be included as a part of the Emergency Department, elements under OAR 333-535-0085 shall also be provided.

(a) Except as permitted under OAR 333-500-0065, every hospital classified as mental or psychiatric and any other hospital, regardless of classification, that provides psychiatric services shall have at least one psychiatric holding room that meets the requirements of section (7) of OAR 333-535-0061 and OAR 309-033-0720(3)(e).

(2) Hospitals providing emergency services shall include the following:

(a) Entrance located on the same level and proximate to the emergency department, sheltered from the weather, and with provision for ambulance and disabled pedestrian access. Emergency entrance location shall be marked by a lighted sign. The emergency access shall be paved to permit discharge of patients from automobiles and ambulances. Temporary parking convenient to the entrance shall be provided;

(b) A reception, triage and control area conveniently located near the entrance, waiting area(s), and treatment room(s). The control station(s) shall be located to permit staff observation and control of access to treatment areas, pedestrian and ambulance entrances and public waiting area;

(c) Public waiting space with toilet facilities, public telephone, and drinking fountain;

(d) Examination and Treatment room(s):

(A) Space requirements. Each examination room shall have a minimum clear floor area of 120 square feet exclusive of toilets, waiting area and casework.

(B) Each examination room shall contain an examination light, medication storage, work counter, a hand-washing station, medical gas outlets per Table 5 (OAR 333-535-0300), electrical outlets above floor level to accommodate required equipment, suction, and space for storage of emergency equipment such as emergency treatment trays, defibrillator, cardiac monitor, and resuscitator.

(C) Treatment cubicles:

(i) Where treatment cubicles are in open multiple-bed areas, each cubicle shall have a minimum of 80 square feet of clear floor space with a minimum of 5 feet between beds and shall be separated from adjoining cubicles by curtains.

(ii) Hand-washing stations shall be provided at a rate of one per four treatment cubicles.

(e) Trauma/cardiac rooms for emergency procedures, including emergency surgery shall have:

(A) At least 250 square feet of clear floor space.

(B) Additional square footage and cubicle curtains for privacy shall be provided to accommodate more than one patient at a time in the trauma room.

(C) Cabinets and emergency supply shelves, image readers, examination lights, and counter space for writing in each room.

(D) Provisions in each room for monitoring equipment.

(E) Storage provided for immediate access to protective attire for infection control.

(F) Doorways leading from the ambulance entrance to the cardiac trauma room shall be a minimum of 5 feet wide to simultaneously accommodate stretchers, equipment, and personnel.

(G) Medical gas outlets shall equal that required of an operating room in Table 5, OAR 333-535-0300;

(f) Provisions for orthopedic and cast work. There shall be storage for orthopedic supplies including but not limited to: splints, traction hooks, portable image readers, exam lights, etc. These provisions may be in a separate room(s) or in a treatment room. If a sink is used for the disposal of plaster of paris, a plaster trap shall be provided. The amount of clear floor space for this area shall be dependent on the Functional Program, procedures planned and the equipment needed;

(g) Scrub stations or hand-washing stations located in or adjacent to each trauma or orthopedic room;

(h) Provisions for infection control and for the handling of a patient requiring isolation in accordance with the hospital's ICRA. If so determined by the hospital's ICRA, the emergency department waiting area and triage areas shall require special measures to reduce the risk of airborne infection transmission. These measures may include enhanced general ventilation and air disinfection similar to inpatient requirements for airborne infection isolation rooms;

(i) Communication center with related equipment shall be convenient to the control station(s), nursing station and have radio, telephone, and intercommunication systems;

(j) Access to radiology and laboratory services;

(k) Storage area out of line of traffic for stretchers and wheelchairs with access from emergency entrances;

(l) Staff work and charting area(s). This may be combined with reception and control area or located within the treatment room;

(m) Storage out of traffic and under staff control for general medical/surgical emergency supplies, medications and equipment such as a ventilator, defibrillator, pumps, patient monitoring, portable image readers and splints;

(n) Soiled utility room or area per OAR 333-535-0260(5) containing clinical sink, work counter, a hand-washing station, waste receptacle, and linen receptacle;

(o) Patients' toilet room convenient to treatment room(s) that shall include a nurse call device or other approved alternative to summon staff; and

(p) Security station. Where dictated by the Functional Program, a security station system shall be located near the emergency entrances and triage/reception area.

(A) Accommodation for hospital security staff, police officers and monitoring equipment eg. Silent alarms, panic buttons, intercom systems, visual monitoring devices, etc.

(B) Located near emergency entrance and triage/reception area.

[ED. NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0085

Hospital Licensed Urgent Care Facilities

This section applies to immediate care and minor emergency facilities that are physically separate from the Emergency Department and do not possess a trauma level designation as defined by OAR 333-200-0080. Such services may be located within an inpatient facility or in a satellite location as defined by OAR 333-500-0025(1)(a), that is under direct control of a general hospital and is licensed as a part of the general hospital. The following elements shall be provided:

(1) Administration and public areas:

- (a) Entrance. Located at grade level or accessible by ramp, sheltered from weather, and disabled accessible.
 - (b) Lobby and waiting areas. These shall include access to:
 - (A) Wheelchair storage space(s);
 - (B) Reception and information counter or desk;
 - (C) Waiting space(s);
 - (D) Public toilet facilities;
 - (E) Public telephone(s). Access to a telephone shall be provided to public, patients and patient's family regardless of the installation of a public pay telephone installed by the telephone company; and
 - (F) Provisions for drinking water. Conveniently accessible provisions for drinking water shall be provided. This may be outside the patient area, in shared facilities.
 - (c) Interview space(s) for private interviews relating to social service, credit, and admissions. Multipurpose rooms for conferences, meetings, and health education shall be provided. In small facilities, the room may also serve for consultation and other purposes.
 - (d) An office area for business transactions, records, and other administrative functions, separate from public and patient areas for confidentiality, shall be provided.
 - (e) Secure storage for employees' personal property. Locked storage (cabinets or secure drawers) convenient to workstations shall be provided for staff valuables.
 - (f) General storage facilities for office supplies, equipment, sterile supplies, and pharmaceutical supplies shall be provided within or convenient to administrative areas.
 - (g) Housekeeping requirements. At least one housekeeping room per floor shall be provided. Each housekeeping room shall contain a floor sink or service sink and storage for housekeeping supplies and equipment.
- (2) Clinical Areas:
- (a) Examination room(s) for medical, obstetrical, and similar examinations shall have a net minimum floor area of 80 square feet, excluding such spaces as vestibule, toilet, closet, and work counter (whether fixed or movable). Arrangement shall permit at least 2 feet 8 inches clearance at each side and at the foot of the examination table. A hand-washing station and a counter or shelf space for writing shall be provided.
 - (b) Treatment room(s) for minor surgical procedures and cast procedures shall have a minimum floor area of 120 square feet, excluding such spaces as vestibule, toilet, closet, and work counter (whether fixed or movable). The minimum room dimension shall be 10 feet. A minimum clearance of 3 feet around the perimeter of the treatment table shall be provided. Work counters, storage cabinets, and a hand-washing station shall be provided.
 - (c) Documentation space for charting and writing clinical records shall be provided. Work counter, communication system, and space for supplies shall be provided. A separate space may be omitted if these functions are accommodated in each examination room and each treatment room.
 - (d) A Cardiac Pulmonary Resuscitation emergency cart shall have a dedicated storage space away from traffic but immediately available to all areas including entrance and receiving areas. (See OAR 333-535-0310, Electrical Requirements)
 - (e) Medication storage meeting Board of Pharmacy administrative rules OAR chapter 855, division 41.

- (f) Clean storage. A separate room or enclosed closet(s) for storing clean and sterile supplies shall be provided. This storage shall be in addition to cabinets and shelves in treatment rooms. Sterile items shall be protected from dust.
 - (g) Soiled holding area. Provisions shall be made for separate collection and disposal of soiled materials. A hand-washing station shall be provided.
 - (h) Sterilizing facilities. A system for sterilizing equipment and supplies shall be provided. Sterilizing procedures may be done on or off-site. Disposable items may also be used to satisfy functional needs.
 - (i) Laboratory facilities, meeting laboratory licensing rules under OAR 333-024 and 333-535-0090 shall be readily available either within the department or through an effective contract with nearby hospitals or laboratory services.
 - (j) Staff lounge and toilet facilities shall be readily available to the unit.
 - (k) Patient toilets. Provide patient toilet(s) readily available or within the clinic space.
 - (l) If radiographic equipment is provided, the installation shall meet rules of the Department of Human Services, Public Health Division, Radiation Protection Services under OAR chapter 333, divisions 100 through 120.
 - (m) Medical records storage requirements. Filing cabinets and storage shall be provided for the safe and secure storage of patient records with provisions for ready retrieval.
 - (n) A toilet room containing a hand-washing station shall be accessible from all examination and treatment rooms. Where a facility contains no more than three examination or treatment rooms, the patient toilet shall be permitted to serve waiting areas.
 - (o) Basic diagnostic procedures (these may be part of the outpatient service, off-site, shared, by contract, or by referral) shall be provided and shall include the following for imaging facilities:
 - (A) Support areas for imaging facilities:
 - (i) Viewing and administrative areas;
 - (ii) Film and media processing facilities in accordance with the Functional Program; and
 - (iii) Storage facilities for exposed film as required by the Functional Program.
 - (B) Support areas for patients that include dressing rooms or booths with convenient toilet access. Toilet rooms with hand-washing stations shall be accessible to procedure room(s) where the procedure may result in the immediate need for toilet facilities.
- Stat. Auth.: ORS 441.060
 Stats. Implemented: ORS 441.060

333-535-0086

Hospital Licensed Physician's Offices and Outpatient Clinics

This rule applies to Physician Outpatient Clinics that are under the license of a general hospital and either physically connected or in freestanding, satellite locations, as defined by OAR 333-500-0025(1)(a).

- (1) OAR 333-535-0085 shall apply except as follows:
 - (a) Subsection (1)(a) shall not apply except the entry shall be disabled accessible;
 - (b) Subsection (2)(d) shall not apply;
 - (c) Subsection (2)(j) shall not apply; and

(d) Subsection (2)(n) shall apply except in existing conditions where public toilet rooms do not exist, then patient toilets may be used for public when addressed by the hospital's Functional Program.

(2) The ventilation requirements of OAR 333-535-0300 and electrical requirements of OAR 333-535-0310 shall not apply, but spaces shall conform to the requirements of the Oregon Mechanical Specialty Code, the Oregon Electrical Specialty Code, and the Oregon Structural Specialty Code as they are enforced by the Oregon Building Codes Division and Authorities having Jurisdiction.

(3) For Outpatient Clinics where only counseling or non-clinical services are provided, wheelchair storage space(s), examination room(s), treatment room(s), drug distribution station, clean workroom or clean holding room, and soiled workroom or soiled holding room may be omitted.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0090

Laboratory Suite

(1) Inpatient hospital laboratory facilities shall be provided for hematology, clinical chemistry and urinalysis, and may include cytology, pathology, immunochemistry, microbiology, serology, and immunology to meet requirements for services as stated in General Rules (OAR 333-535-0010). These may be provided within the hospital or through an effective contract arrangement with a nearby laboratory service. Hospital laboratories located in freestanding clinics shall conform to rules under section (2) of this rule. The following shall be provided:

(a) Laboratory work counter(s) with space for microscopes, appropriate chemical analyzer(s), incubator(s), and centrifuge(s). Work areas shall include sinks with water and access to electrical services as needed;

(b) Refrigerated blood storage facilities for transfusions shall be provided. Blood storage refrigerator shall be equipped with temperature-monitoring and alarm signals located for 24-hour response. Blood banks must be provided emergency power for continued cooling during an interruption of the normal power supply;

(c) Dedicated hand-washing stations shall be located within 20 feet of each workstation and within each room with a workstation;

(d) Appropriate storage facilities, including refrigeration shall be provided for reagents, patient specimens, controls, and supplies;

(e) Urine and feces collection rooms shall be equipped with a toilet and hand-washing station. This may be outside the laboratory suite;

(f) Blood collection facilities shall include a work counter, conveniently located hand-washing station, space for patient seating and sharps container(s);

(g) Chemical safety provisions, which may include emergency shower, eye flushing devices, and appropriate storage for flammable liquids shall be provided in accordance with Oregon State Public Health Laboratory Licensing rules, OAR 333-024-0005 through 333-024-0055, and Oregon OSHA Administrative Rules;

(h) Facilities and equipment for sterilization of contaminated specimens before transport to incineration facilities in accordance with Oregon State Public Health Laboratory Licensure Rules and Oregon OSHA Administrative Rules;

- (i) If radioactive materials are used or stored, facilities shall be available for their safe storage and disposal;
 - (j) Administrative areas including offices as well as space for clerical work, filing, and record maintenance shall be provided apart from testing or storage areas;
 - (k) Lounge, locker, and toilet facilities shall be conveniently located for laboratory staff. These may be outside the laboratory area and shared with other departments; and
 - (l) The Functional Program shall describe the type and location(s) for all special laboratory equipment that is to be wired, plumbed, or plugged in, and the building utility systems required to operate each.
- (2) Laboratory services serving hospital outpatient clinics may be onsite or through an effective contractual arrangement with a laboratory service or through the primary hospital laboratory. Services may include hematology, clinical chemistry, urinalysis, cytology, pathology, microbiology, serology, immunology, and immunohematology. When these services are not effectively provided elsewhere, the following shall be available within the clinic:
- (a) Laboratory work counter(s), with sink;
 - (b) Designated sink equipped for hand-washing station in addition to process sink(s);
 - (c) Storage cabinet(s) or closet(s);
 - (d) Specimen collection room with a toilet, hand-washing station, and an area for handling and storing specimens;
 - (e) Blood collection facilities including secure seating, a work counter, and access to a hand-washing station. Collection facilities may be within the laboratory or in satellite location(s); and
 - (f) Refrigeration for storage of reagents, controls and patient specimens as necessary. Separate refrigeration must be provided for injectibles and food or drink that is to be consumed by patients or staff.
- (3) Laboratory units shall conform to OAR 333-024-0000 and the rules there under regarding laboratory requirements. Standards contained in NFPA 99 regarding laboratories and health related institutions are also required.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0100

Imaging Facilities

- (1) General: Imaging facilities are those which provide fluoroscopy, radiography, mammography, tomography, computerized tomography scanning, ultrasound, magnetic resonance, angiography, and other similar techniques. Room layouts, including clearances, must meet equipment manufacturers' minimum recommendations.
- (2) Radiation Protection: All imaging facilities and radiation producing equipment installations must comply with Department of Human Services, Public Health Division, Regulations for Control of Radiation, OAR chapter 333, divisions 100 through 123, and be licensed by Radiation Protection Services of the Division.
 - (a) Where protected alcoves with view windows are required, a minimum of 1 foot 6 inches between the view window and the outside partition edge shall be provided.
- (3) Angiography. The following shall be provided:

- (a) Procedure rooms shall be a minimum of 400 square feet in size exclusive of fixed cabinets and built-in shelves;
 - (b) A control room shall be provided to house associated staff and equipment. A view window shall be provided to permit full view of the patient;
 - (c) Area for image reading;
 - (d) A scrub sink, as referenced in OAR 333-535-0260, located outside the staff entry to the procedure room shall be provided for staff use;
 - (e) Facilities shall be available for patients waiting on stretchers that are out of the line of traffic;
 - (f) Storage for equipment; and
 - (g) Facilities shall be available within the facility for extended post-procedure observation of outpatients.
- (4) Cardiac Catheterization Lab. Facilities for cardiac catheterization may be combined with the imaging department or be part of the surgery suite. If provided, cardiac catheterization lab facilities shall meet the rules for angiography rooms under section (3) above. The following additional requirements shall be provided:
- (a) A separate scheduling and staff work space, cardiologist's office and staff toilet shall be provided when the facilities are located outside the imaging suite; and
 - (b) There shall be access to a clean assembly/workroom with Hi-vacuum or gravity steam sterilizers and sterilization equipment to accommodate heat sensitive equipment.
 - (c) Electrophysiology labs. If electrophysiology labs are also provided in accordance with the approved Functional Program, these labs may be located within the catheterization suite or located in a separate functional area proximate to the cardiac care unit.
 - (d) For Cardiac Catheterization Lab combined with Surgery refer to OAR 333-535-0110 to be used in conjunction with this section.
- (5) Computerized Tomography (CT) Scanning. The following shall be provided:
- (a) Procedure rooms shall be configured to accommodate equipment in accordance with the equipment manufacturers' recommendations;
 - (b) When required by the Functional Program, control room(s) shall be located to allow for film processing and designed to accommodate the computer and other controls for the equipment. When viewing of patients is required, a window shall be provided to permit full view of the patient; and
 - (c) A conveniently available patient toilet.
- (6) Diagnostic X-ray (Radiography). The following shall be provided:
- (a) Radiography room(s), sized to accommodate the Functional Program;
 - (b) Each X-ray room shall include a shielded control alcove designed to provide a full view of the patient when the table is in the tilt position or the chest X-ray is being utilized. For mammography machines with built-in shielding for the operator, the alcove may be omitted when approved by the Department of Human Services, Public Health Division, Radiation Protection Services; and
 - (c) Rooms primarily utilized for fluoroscopy shall have direct access to a toilet room.
- (7) Magnetic Resonance Imaging (MRI). The following shall be provided:
- (a) MRI procedure room(s) to accommodate the Functional Program and meet equipment manufacturers' recommendations;
 - (b) Secure storage for patient belongings;

- (c) A control room with full view of the MRI;
 - (d) A computer room as needed to support the specific equipment installation;
 - (e) Cryogen storage when service to replenish supplies is not otherwise available;
 - (f) Power conditioning and voltage regulation equipment as well as direct current (DC) when required by the equipment manufacturer;
 - (g) Magnetic shielding and radio frequency shielding when required by the equipment manufacturer;
 - (h) Patient holding area convenient to the MRI unit and large enough to accommodate stretchers;
 - (i) Venting of cryogen exhaust to the outside; and
 - (j) Signage shall be provided for the purpose of limiting ferrous material.
- (8) Ultrasound. The following shall be provided:
- (a) Procedure room(s) meeting equipment manufacturers' minimum room size and configuration recommendations; and
 - (b) A patient toilet room shall be accessible to every three procedure rooms without traveling through public areas.
- (9) Nuclear medicine. The nuclear medicine area shall include the following: (See also, OAR 333-535-0105(3))
- (a) Space requirements. Space shall be adequate to permit entry of stretchers and beds and able to accommodate imaging equipment, electronic consoles, and if present, computer terminals;
 - (b) Hand-washing stations provided within each procedure room;
 - (c) Dose administration area(s) as specified by the Functional Program shall be provided near the preparation area. The area shall provide for visual privacy from other areas due to long periods for dose effects, as well as features for comfortable seating, varied lighting, and entertainment; and
 - (d) Positron Emission Tomography (PET). When provided, in addition to the nuclear medicine requirements, PET facilities shall be in accordance with the Functional Program, including the following:
 - (A) Laboratory and equipment space shall be provided as follows:
 - (i) Scanner room should be not less than 300 square feet and space for the cyclotron room should be not less than 225 square feet with 16 square feet of space safe for storage of parts that may require cool-down periods of one year or more;
 - (ii) Both hot (radioactive) labs and cold labs, each requiring a minimum of 250 square feet. Blood labs having a minimum of 80 square feet;
 - (iii) Patient holding areas capable of accommodating a minimum of two stretchers; and
 - (iv) Gas storage areas large enough to accommodate sufficient bottles of gas piped individually to the cyclotron or the lab.
 - (B) Construction requirements capable of providing protection from the high radiation generated from the cyclotron shall be provided.
 - (C) Ventilation adequate for the occupancy shall be provided as follows:
 - (i) Compressed air, or equivalent, shall be provided to pressurize a water circulation system;
 - (ii) Special ventilation systems together with monitors, sensors, and alarm systems shall be provided to vent gases and chemicals; and

(iii) Regarding heating, ventilating, and air-conditioning systems, the highest pressure shall be in the coldest (radiation) areas and the exhaust shall be in the hottest (radiation) areas. (Redundancy may be important.)

(D) A redundant plumbing system connected to a holding tank shall be required to prevent accidental leakage of contaminated water into the regular plumbing system.

(10) Support Spaces. The following spaces shall be common to the imaging department and shall be minimum requirements unless stated otherwise:

(a) Patient waiting areas shall provide seating capacity in accordance with the Functional Program;

(b) Control desk and reception area;

(c) Patient holding area under staff control, designed to accommodate inpatients on stretchers or beds and outpatients, that is not in the path of traffic. This area may be shared with the dose administration area and patient waiting areas provided there is visual privacy between the areas;

(d) Patient toilet room with hand-washing station shall be provided and reserved for nuclear medicine patients convenient to waiting and procedure rooms and directly accessible from each fluoroscopy room;

(e) Patient dressing rooms. Dressing rooms with convenient access to waiting areas and procedure rooms shall include a seat or bench, a mirror, and provisions for hanging patient's clothing and securing valuables;

(f) Access to staff toilet, lounge and locker facilities which shall be within or closely available to the department;

(g) Film storage facilities for active and inactive files under departmental administrative control shall be provided to properly secure and protect film against loss or damage. This storage is permitted to be off site;

(h) Storage for unexposed film;

(i) Contrast media preparation area with sink, counter and storage to allow mixing of contrast media. Where prepared media is used, this area may be omitted and storage shall be provided for the prepared media;

(j) A darkroom shall be provided for film processing unless the processing equipment does not require a darkroom for loading and transfer;

(k) If automatic film processors are used, a receptacle of adequate size with hot and cold water for cleaning processor racks shall be provided;

(l) Quality control room. An area or room for immediate viewing of film after processing shall be provided unless other viewing facilities are immediately available;

(m) Housekeeping facilities, including a service sink or floor receptacle and storage for cleaning equipment and supplies;

(n) A hand-washing station shall be provided in each procedure room unless it is used only for routine diagnostic screening such as for chest X-rays and where the patient is not physically handled by the staff. A hand-washing station shall be provided convenient to MRI, CT and ultrasound rooms, but it need not be within the room;

(o) Clean storage area. Provisions shall be made for storage of clean supplies and linens (See OAR 333-535-0260 for clean storage details and definitions);

(p) Soiled holding area. Provisions shall be made for a separated holding area for soiled materials, linens and trash. Hand-washing facilities shall be closely available. If cleaning and disinfecting of equipment occurs within the imaging department, a counter, sink,

hand-wash station and exhaust ventilation shall be provided (See OAR 333-535-0260 for clean storage details and definitions);

(q) Provisions shall be made for locked storage of medications and drugs when the program includes their use; and

(r) When the Functional Program requires a centralized computer area, it shall be a separate room with access terminals available within the imaging rooms.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0105

Radiation Oncology Facility or Department

All radiation oncology installations must comply with provisions of the Department of Human Services, Public Health Division, Regulations for Control of Radiation, OAR chapter 333, divisions 100 through 123 and be licensed by Radiation Protection Services of the Division.

(1) Treatment Rooms:

(a) Rooms and control areas shall be provided as necessary to accommodate the radiation oncology Functional Program. Equipment manufacturers' recommendations should be sought and followed. Any radiotherapeutic (i.e. cobalt, linear accelerators, high dose rate after loading, etc.) treatment room shall be sized in accordance with manufacturers' recommended standards and shall accommodate a stretcher;

(b) Control areas shall have visual and audio contact with the patient in the treatment room as appropriate to the radiation protection needs of the equipment;

(c) If invasive procedures take place in the treatment room, the room must also meet the rules for surgery facilities, OAR 333-535-0110; and

(d) Hyperthermia room, when provided, shall be of adequate size to accommodate equipment, stretcher, and a hand-washing station. This may be combined with an examination room.

(2) Treatment Support Areas:

(a) Simulator room and control area shall be sized to accommodate equipment and stretcher per the manufacturers' recommendations. A hand-washing station shall be provided within the room.

(b) The control area shall have visual and audio contact with the simulator room.

(c) Darkroom or film processing area shall be convenient to the treatment room(s) and simulator area, and shall include a utility sink in or convenient to this area. Film storage for unprocessed film shall be provided.

(d) Block fabrication, when provided, shall have seamless flooring and integral coved base. Non-porous counter tops shall have backsplash, and a hand-washing station shall be provided. Exhaust hoods shall be provided.

(e) Treatment planning, if provided, shall be sized to accommodate manufacturers' dosimetry system requirements.

(3) Hot lab, if provided, shall include the following features:

(a) Seamless flooring and integral coved base.

(b) Non-porous counter tops with backsplash.

(c) Adequate storage and work area for multiple types of radioactive material, with adequate shielding and security including additional support areas for cobalt room for hot lab storage.

(d) A hand-washing station shall be accessible. If located in the hot lab, the sink must have a filtration trap. Refer to OAR 333-535-0300(5)(e)(G) for mechanical requirements.

(e) If radiopharmaceutical preparation is performed on site, an area adequate to house a radiopharmacy shall be provided with appropriate shielding.

(A) Space requirements shall include the following:

(i) Adequate space for storage of radionuclides, chemicals for preparation, dose calibrators, a film file area, and record-keeping;

(ii) If pre-prepared materials are used, storage and calculation area may be considerably smaller than that for on site preparation; and

(iii) Space shall be adequately provided for dose calibration, quality assurance, and record-keeping.

(B) Radiation protection requirements. The area may still require shielding from other portions of the facility.

(C) Construction requirements shall include the following:

(i) Floors and walls constructed of materials that are easy to decontaminate;

(ii) Vents and traps for radioactive gases shall be provided if such are used; and

(iii) Hoods for pharmaceutical preparation shall be in accordance with mechanical requirements of OAR 333-535-0300 and other applicable standards.

(f) Nuclear Waste Disposal. See Code of Federal Regulations (CFR), Title X, parts 20 and 35, concerning the handling and disposal of nuclear materials in health care facilities.

(4) Patient Support Areas: These areas shall include, but not be limited to:

(a) Examination rooms equipped with a hand-washing station. At least one examination room shall accommodate stretcher patients;

(b) Patient reception and waiting area. The waiting area shall be out of traffic, under staff control, and both shall have seating capacity in accordance with anticipated needs. If the suite is routinely used for outpatients and inpatients at the same time, separate waiting areas shall be provided with screening for visual privacy between the waiting areas;

(c) Patient toilet rooms. Toilet rooms shall be provided accessible to the waiting rooms and shall be equipped with an emergency call station; and

(d) Patient dressing rooms. Dressing rooms shall be provided in accordance with the anticipated needs, shall be accessible to the waiting areas with the provision for safe storage of valuables and clothing. At least one space shall be large enough for staff-assisted dressing.

(5) General Support Areas: These areas shall include, but not be limited to:

(a) Clean storage. Provisions shall be made for the storage of clean supplies and linens, in or closely available to the department;

(b) Soiled holding area. Provisions shall be made for handling and separately holding contaminated items. If toxic chemicals are used, exhaust shall be provided. Whenever soiled items are handled, a hand-washing station shall be provided;

(c) Housekeeping closet shall be equipped with service sink or floor receptor. The closet shall be large enough for equipment or supplies storage;

(d) Staff facilities. Toilets shall be convenient for staff use. Staff lounge with lockers is required if not available elsewhere; and

(e) Film and radiation oncology patient record file area.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0110

Surgical Facilities

A surgical unit shall consist of but not be limited to facilities as follows for exclusive use of the surgery department, unless otherwise noted:

(1) The number of operating rooms and recovery beds and the sizes of the service areas shall be based on the expected surgical workload. The surgical suite shall be located and arranged to prevent non-related traffic through the suite. Also see OAR 333-535-0300 for mechanical rules and OAR 333-535-0310 for electrical rules which apply;

(2) Certain rules of this section differ dependent upon the type of surgical procedures performed. These are classified as one of the following three categories:

(a) Unrestricted areas for Minor Surgical and Diagnostic Procedures: Unrestricted areas include a central control point established to monitor the entrance of patients, personnel, and materials. Street clothes are permitted in this area and traffic is not limited. Minor procedures are those that conform to the criteria listed in paragraphs (2)(a)(A) through (D) of this rule based on an assessment of the patient. These procedures are non-invasive and require no general anesthetic.

(A) Anesthesia is limited to local anesthesia or conscious sedation;

(B) Procedure time (duration) is less than two hours;

(C) Procedure is non-invasive with low risk for infection; and

(D) Patient assessment indicates no special risks for cardiorespiratory complications.

(b) Semi-restricted areas include the following:

(A) The peripheral support areas of the surgical suite, and storage areas for clean and sterile supplies, work areas for storage and processing of instruments, and corridors leading to the restricted areas of the surgical suites; and

(B) Traffic in this area is limited to authorized personnel and patients. Personnel are required to wear surgical attire and cover all head and facial hair.

(c) Restricted areas for Major Surgical and Diagnostic Procedures are those which exceed the criteria described for Minor Surgical and Diagnostic Procedures in OAR 333-535-0110(2)(a). Restricted areas include the following:

(A) The operating and procedure rooms, the clean core, and scrub sink areas.

(B) Where surgical attire, hair coverings, and masks are required due to the presence of open sterile supplies, scrubbed people or similar circumstances.

(3) Operating Rooms:

(a) One or more operating rooms shall be provided. Each operating room shall provide a system for emergency communication with the surgical control station which can be operated without use of the hands, but which is not foot operated. No plumbing fixtures or open drains shall be provided in operating rooms except as stipulated in subsection (3)(d). Each operating room shall have a minimum clear area as follows:

(3)(d). Each operating room shall have a minimum clear area as follows:

(A) Existing operating rooms shall have not less than 360 square feet exclusive of fixed cabinets and built-in shelves. The minimum dimension shall be 18 feet between fixed

cabinets and built-in shelves. Image readers for handling at least two films at the same time shall also be provided.

(B) In new construction, operating rooms shall have a minimum clear area of 400 square feet exclusive of fixed or wall-mounted cabinets and built-in shelves, with a minimum of 20 feet clear dimension between fixed cabinets and built-in shelves. Image readers for handling at least four films at the same time shall also be provided.

(b) Operating room(s) for orthopedic surgery, when provided, shall in addition to meeting subsection (a) of this section, have enclosed storage space for splints and traction equipment. Storage may be outside the operating room but must be located for convenient access. If plaster of paris is used for cast work, also provide a plaster sink outside the operating room, but within the operating suite.

(c) Operating rooms for cardiovascular surgery, when provided, shall provide appropriate plumbing connections in both the cardiovascular operating room and pump room and shall in addition to meeting subsection (a) of this section, provide a minimum clear area as follows:

(A) Existing facilities shall have not less than 400 square feet exclusive of fixed cabinets and built-in shelves with a minimum of 20 feet clear dimension between fixed cabinets and built-in shelves; and

(B) In new construction, rooms for cardiovascular, orthopedic, neurological, and other special procedures or combination of procedures such as cardiac catheterization lab and surgery that require additional personnel and/or large equipment shall have, in addition to the above requirements for general operating rooms, a minimum clear area of 600 square feet with a minimum room dimension of 20 feet clear dimension exclusive of fixed or wall-mounted cabinets and built-in shelves.

(d) Operating rooms for surgical cystoscopic and surgical endoscopic procedures and operating rooms dedicated to eye surgery, when provided, shall meet requirements of subsection (a) of this section, but clear area of the room shall be as follows:

(A) Existing facilities shall have not less than a minimum of 250 square feet exclusive of fixed cabinets and built-in shelves.

(B) In new construction, rooms for surgical cystoscopic and other endourologic procedures shall have a minimum clear area of 350 square feet exclusive of fixed or wall-mounted cabinets and built-in shelves, with a minimum of 15 feet clear dimension between fixed cabinets and built-in shelves. If cystoscopy rooms are used for procedures other than cystoscopy, provisions must be made to allow cleaning and sealing of any floor drains, and such procedures must be included in the hospital's written infection control policy.

(e) Operating rooms for minor surgical procedures, as defined in section (2) of this rule, shall meet requirements of subsection (a) of this section, except that clear area of the room shall be a minimum of 200 square feet exclusive of fixed cabinets and built-in shelves and minimum dimensions do not apply. Film illuminators are required only if procedures involve the use of X-rays.

(f) Despite requirements under subsections (a) through (e) of this section, needs for some procedures may require additional clear operating room space, and special plumbing and mechanical features. Such specialized operating rooms are not addressed by subsections (a) through (e) of this section, and are the responsibility of the hospital and their design consultants.

(4) Service areas: Services, except the enclosed soiled utility room mentioned in subsection (f) of this section and the housekeeping closet in subsection (q) of this section, may be shared with obstetrical facilities if the Functional Program and project design reflect this concept. Service areas, when shared with delivery rooms, shall be arranged to avoid the need for patients or staff to pass between the operating room and the delivery room areas. (See also obstetrical rules under OAR 333-535-0120.) The following services shall be provided:

(a) Control station located to permit visual observation of all traffic into and within the suite;

(b) Administrative and administrative support space in accord with the hospital's program needs;

(c) Sterilizing facility(ies) with high speed autoclave(s) for emergency use. Other facilities for processing and sterilizing reusable instruments, etc., may be located in another hospital department such as Central Services. Immediate access to sterilizing facilities is not required where only disposable supplies, instruments and equipment are used. Sterilization equipment shall conform to the Oregon Boiler and Pressure Vessel Specialty Code, ORS 480.525(1)(e);

(d) Medication storage and distribution facilities. Provisions shall be made for storage and preparation of medications administered to patients. A refrigerator and storage system meeting the requirements of Oregon Board of Pharmacy rules, OAR chapter 855, division 41 shall be provided. A hand-washing station shall be provided in or accessible to each area or room;

(e) Scrub facilities. For major surgical procedures, two scrub facilities shall be provided near the entrance to each operating room. Two scrub positions may serve two operating rooms if both are located adjacent to the entrance of each operating room. For minor surgical procedures, a scrub sink or a hand-washing station shall be provided in or accessible to each room. This sink shall be equipped with fittings usable without the use of hands;

(f) Soiled utility room. An enclosed soiled utility room for the exclusive use of the surgical suite staff or soiled holding room that is part of a system within the building for the collection and disposal of soiled material shall be provided. The soiled utility room shall contain a clinical sink or equivalent flushing type fixture, work counter, sink equipped for hand-washing, waste receptacle, and linen receptacle. When a soiled holding room is used, the clinical sink and work counter may be omitted from that room. (Also see subsection (g) of this section for fluid waste disposal facilities.) Soiled utility or holding areas shall not have direct connection with operating rooms or other sterile activities. The maximum travel distance to soiled utility or holding rooms shall be not more than six rooms or 180 feet;

(g) Fluid waste disposal facilities. These shall be located convenient to, but not connected with, the operating rooms. A clinical sink or equivalent equipment in a soiled utility room or in a soiled holding room would meet this standard if convenient for use. When the surgical program does not include procedures with substantial liquid or solid wastes (e.g. minor eye surgery), a clinical sink is not required;

(h) Clean utility room or a clean supply room. A clean utility room is required when clean materials are assembled within the surgical suite prior to use. A clean utility room shall contain work counter, a hand-washing station, and space for clean and sterile

supplies. If the Functional Program defines a system for the storage and distribution of clean and sterile supplies in a clean supply room, the counter and sink may be omitted. The clean workroom or supply room may be shared with the delivery suite when provisions for joint use are included in the hospital's infection control policy and arrangement allows for direct access from both surgery and delivery suites. (See also obstetrical rules under OAR 333-535-0120.);

(i) Medical gas storage facilities. Storage of bulk medical gases shall be provided outside or inside the facility. Provisions shall be made for additional separate storage of reserve gas cylinders to complete at least one day's procedures. Storage facilities shall be in compliance with National Fire Protection Association (NFPA) 99;

(j) Anesthesia workroom. Inhalation anesthesia workroom for cleaning, testing, and storing anesthesia equipment shall contain a work counter and sink. Provisions shall be made for separated storage of clean and holding of soiled items. When facilities for cleaning and testing are available elsewhere in the building or the surgical program does not involve substantial anesthesia, a separate utility room is not required;

(k) Anesthesia storage. Anesthesia storage facilities shall be provided for anesthesia-related materials stored within the surgery suite;

(l) Equipment storage room(s) for equipment and supplies used in surgical suite. Ten percent of the surgical suite shall be devoted to equipment storage space. See OAR 333-535-0270 for storage requirements;

(m) Staff clothing change areas. Appropriate areas shall be provided for male and female personnel including orderlies, technicians, nurses and doctors working within the surgical suite. Each area shall contain lockers, showers, toilets, hand-washing stations, and space for donning scrub attire. In surgical suites providing general anesthesia and invasive surgical procedures, these areas shall be arranged to encourage a traffic pattern so that personnel entering from outside the surgical suite can change and move directly into the surgical suite. Showers are not required in suites limited to minor procedures;

(n) Pre-surgical waiting area. In facilities with two or more operating rooms, a room or separate area shall be provided to accommodate stretcher patients waiting for surgery. This may be adjoining the post anesthesia recovery area and be serviced by the same staff nurse when feasible. The area shall be located to allow for nursing supervision and emergency communications;

(o) Storage areas for portable equipment used in surgery, such as portable X-ray unit, stretchers, fracture tables, warming devices, auxiliary lamps, etc. These areas shall not infringe on the width of exit corridors;

(p) Lounge, toilet facilities, and dictation and report preparation space for surgical staff. These facilities shall be provided in hospitals having three or more operating rooms and shall be located to permit use without leaving the surgical suite. A toilet room shall be provided near the recovery room(s);

(q) Housekeeping closet. A closet containing a floor receptor or service sink and storage space for housekeeping supplies and equipment shall be provided exclusively for the surgical suite;

(r) For major procedures, an area for preparation and examination of frozen sections. This may be part of the general laboratory if the system and procedures provide immediate results that will not unnecessarily delay the completion of surgery;

(s) Ice machine to supply ice for patient use and treatments;

- (t) Provisions for refrigerated blood bank storage when major procedures are included; and
- (u) Post anesthesia care unit for major surgical procedures. Each recovery unit shall be designed to provide:
 - (A) A medication distribution station, hand-washing stations (at a rate of one sink per four beds), nurses' station with charting facilities and clinical sink. Provisions for bedpan cleaning, storage space for stretchers, supplies and equipment shall be closely available.
 - (B) Clearance space of at least 5 feet between patient beds and 4 feet between sides of beds and adjacent walls.
 - (C) Patient privacy such as cubicle curtains.
 - (D) Provisions shall be made for isolation of infectious patients, although a separate isolation room is not mandated. At least one door to a recovery unit shall access directly from the surgical suite without crossing uncontrolled common hospital corridors. Separate and additional recovery space may be necessary to accommodate surgical outpatients, where applicable but is not required.
- (5) Separate Hospital Licensed Outpatient Surgical Facilities. The following additional features shall be provided when an outpatient surgical facility is outside the inpatient hospital building or remote from the inpatient suite:
 - (a) Visual privacy shall be provided for registration, preparation, examination and recovery. Audible privacy shall be provided during registration;
 - (b) Provisions shall be made for patient examination, interview, testing and preparation prior to surgery;
 - (c) Outpatient surgical facilities not part of an inpatient hospital structure shall meet the requirements of the Oregon Structural Specialty Code and the NFPA 101 and 99; and
 - (d) Outpatient surgery change areas. If the Functional Program defines an outpatient surgery component as part of the inpatient surgical suite, facilities shall be provided where outpatients may change from street clothing into hospital gowns and be prepared for surgery. This would include facilities for waiting, storage of clothing, toilets, and space for gowning. Separate clothes changing areas are not required when sufficient pre-operative holding cubicles are available;
 - (e) Phase 1 recovery. If the facility provides outpatient surgery, rooms or cubicles for postanesthesia care and recovery shall be provided. At least 3 feet shall be provided at each side of each bed or recovery lounge chair and at the foot of each bed as needed for circulation of staff and gurneys and wheelchairs. Recovery spaces shall be observable from a nursing station. Provide hand wash stations at a rate of one sink per six recovery beds; and
 - (f) Phase 2 recovery spaces. Dedicated recovery spaces or a dedicated recovery lounge shall be provided in facilities where the surgical program includes patients who do not require postanesthesia recovery or who have completed postanesthesia recovery, but need additional time for observation by staff prior to leaving the facility. Access to toilet facilities shall be provided.
 - (g) Administrative and public areas. The following shall be provided:
 - (A) A patient and visitor waiting room or area and information and reception desk or counter;
 - (B) Public telephone or other phone(s) usable by patients and visitors;
 - (C) Space(s) for private interviews relating to social services, credit and admission;

(D) Office space(s) for business transactions, records, and administrative and professional staff, and space and equipment for medical records dictating, recording and retrieving. These shall be separate from public and patient areas with provisions for confidentiality of records;

(E) Secure storage for staff clothing and personal effects; and

(F) General storage for administrative supplies.

(6) Dental operations: Dental surgery facilities not part of a multi-specialty surgical unit shall meet the requirements of sections (1) through (4) of this rule. Operating rooms dedicated to dental surgery shall also conform to the following:

(a) Operating rooms used for invasive maxillofacial and reconstructive dental procedures with general anesthesia shall meet the rules of an operating room for major surgical procedures, except that room size shall be a minimum of 250 square feet; and

(b) Operating rooms for extractions and minor operative procedures within limited anesthesia or conscious sedation shall provide a minimum of 132 square feet of clear space and include the following features:

(A) Four feet or more of clear space at one side of the dental chair and a clear access route for a stretcher or gurney; and

(B) Mechanical and electrical features of a minor surgical procedure room according to OAR 333-535-0300 and 333-535-0310.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0115

Endoscopy Facilities

If diagnostic endoscopy procedures are performed, the following shall apply:

(1) Diagnostic Procedure Room(s):

(a) Each diagnostic procedure room shall have a minimum clear area of 200 square feet exclusive of fixed cabinets and built-in shelves. If portable equipment is used for vacuum and oxygen, room size shall be increased to 225 square feet.

(b) A hand-washing station with hands-free controls shall be available in each procedure room.

(c) Station outlets for oxygen, vacuum (suction), and medical air shall be provided in accordance with Table 5, OAR 333-535-0300. Use of portable equipment is allowable when a piped-in central system is not available.

(d) Mechanical ventilation shall comply with OAR 333-535-0300, including Tables 2 and 3 of the same rule. If endoscopy rooms also serve for bronchoscopy services, these systems must meet ventilation requirements for this service in Table 2, OAR 333-535-0300.

(2) Instrument Processing Facilities. There shall be dedicated processing room(s) for cleaning and disinfecting instrumentation. Cleaning spaces shall allow for flow of instrumentation from the contaminated area to the clean area and, then to clean storage cabinets which may be in enclosed cabinets in the procedure rooms. Clean equipment spaces, including storage, must protect equipment from contamination. The following space and equipment shall also be included:

- (a) If scopes are cleaned by hand, two separate utility sinks, arranged to prevent splash from one to the other, one for clean and one for soiled equipment processing;
- (b) A separate hand washing sink;
- (c) Space and facilities for the disposal of waste materials;
- (d) When automatic endoscope cleaners and sonic processors are used, space and plumbing fixtures for this equipment shall be provided;
- (e) Ventilation system: Negative air pressure and exhaust air from the room per Table 2, OAR 333-535-0300, shall be maintained. A hood is recommended for off-gassing and sterilants that cause respiratory irritation; and
- (f) Outlets for vacuum and/or compressed air shall be provided in accordance with the Functional Program.

(3) Patient Holding and Recovery Area (if not shared with surgical recovery). The following shall be provided:

- (a) Each patient cubicle shall allow a minimum 3 feet between stretchers or recovery chairs;
- (b) Each patient cubicle shall be equipped with oxygen and vacuum outlets in accordance with Table 5, OAR 333-535-0300;
- (c) Provisions for respiratory isolation shall be provided if bronchoscopy patients are also served in patient cubicles. When procedures are to be performed on persons who are known to have or suspected of having airborne infectious diseases, these procedures shall be performed only in a room meeting airborne infection isolation ventilation requirements or in a space using local exhaust ventilation. See also the CDC “Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Healthcare Facilities”;
- (d) Medication preparation and storage with a hand-washing station;
- (e) Toilet facilities;
- (f) Change areas and secure storage for patients' personal property. Patient recovery cubicles may be used when scheduling and capacity allows;
- (g) Nurses' reception and charting area that allows for visual observation of patients;
- (h) Storage provisions for clean supplies;
- (i) A dedicated housekeeping closet;
- (j) A nurse call system or other workable system that allows for summoning staff assistance; and
- (k) A soiled utility or soiled holding room as referenced in OAR 333-535-0260(5) shall be located to serve the endoscopy facility.

[ED. NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0120

Obstetrical Facilities

The maternity unit shall consist of, but not be limited to, facilities as follows for exclusive use of the maternity department, unless otherwise noted:

(1) General:

- (a) The maternity unit shall be located in one area of the hospital and include delivery rooms, labor rooms, recovery rooms, postpartum rooms, labor, delivery, recovery (LDR)

and/or labor, delivery, recovery, postpartum (LDRP) rooms, and the support features described in this section to support the estimated obstetrical workload;

(b) The obstetrical care unit shall be located and arranged to prohibit non-related traffic through the unit;

(c) When delivery and non-obstetrical operating rooms are part of the same suite, access and service arrangements shall be such that neither staff nor patients need to travel through one area to reach the other;

(d) At least one delivery room shall be provided within the obstetrical unit for performing Caesarean sections (C-sections) and complex deliveries except for hospital-based obstetrical centers limited to less than 300 low-risk deliveries per year. In such centers, mothers requiring emergency C-sections and complex deliveries may be transferred to surgery, provided a clean operating room can normally be made available, and infants can be transported back to the obstetrical unit in a controlled transport environment such as an isolette;

(e) When the program indicates wide usage of LDR and/or LDRP rooms in place of separate labor, delivery, recovery and postpartum rooms, the number of labor and postpartum rooms may be reduced or eliminated in accord with the hospital's obstetrical program and workload. Delivery rooms shall be provided per subsection (d) of this section; and

(f) Service areas may be arranged to serve LDR rooms, LDRP rooms and delivery rooms. However, gowning facilities, clean supply, soiled utility rooms, and anesthesia facilities must be arranged to conveniently serve delivery rooms used for C-sections and allow for a sterile operating suite environment. When such support areas are not immediately adjacent, the program and infection control policy must be submitted for Department of Human Services, Public Health Division approval and shall account for such arrangement.

(2) The following patient care facilities shall be provided in accord with section (1) of this rule for exclusive use of the maternity department, unless otherwise noted:

(a) Postpartum patient rooms must meet the same rules as medical and surgical patient rooms under OAR 333-535-0025(1);

(b) Each delivery room shall have a minimum clear area of 300 square feet exclusive of fixed cabinets and built-in shelves and shall be not less than 16 feet wide. Delivery rooms that are routinely used for C-sections shall have not less than 360 square feet of clear area. An emergency communications system that can be activated without use of hands shall be connected with the obstetrical suite control station. Resuscitation facilities (electrical outlets, oxygen, suction, and compressed air) shall be provided for newborn infants within each delivery room in addition to the facilities required for the mother;

(c) LDR and LDRP rooms, when provided, shall be entered from a corridor within the maternity department where public access is under direct control of maternity staff and include the following features:

(A) Each room shall be for single occupancy and provide for a minimum of 5 feet of clear space at the sides and foot of the bed during delivery procedures. Additional space shall be provided for relatives and significant others, a chair for mothers who are breastfeeding, and an infant cribbette;

(B) Mechanical and electrical services for LDR and LDRP rooms shall meet applicable requirements stated in OAR 333-535-0300 and 333-535-0310; and

- (C) Each room shall contain or be closely served by each of the following:
- (i) Enclosed storage cabinets or space for a covered cart for supplies used in normal spontaneous vaginal delivery and the immediate care of a normal newborn, unless the program indicates centralized storage and distribution from a nearby clean supply room;
 - (ii) Storage space for equipment utilized in medical emergencies for mother and infant;
 - (iii) A hand-washing station or scrub sink equipped with a wrist blade fitting or equivalent fitting allowing operation without use of the hands;
 - (iv) Toilet facility and shower;
 - (v) A window is required in each patient room as noted in OAR 333-535-0025;
 - (vi) Storage space for clothing, toilet articles, and other personal belongings of the patient;
 - (vii) An electrically operated nurses' calling system as specified under electrical requirements of this division; and
 - (viii) Examination lighting shall be provided but may be built-in or portable.
- (d) Labor rooms. When provided, these rooms shall be single bed or two-bed rooms with a minimum clear area of 100 square feet per bed. In facilities having only one delivery room, two or more labor rooms or LDRP rooms shall also be provided. When two labor rooms only are utilized in connection with a single delivery room, one labor room shall be large enough to function as an emergency delivery room with a minimum of 160 square feet and have at least two oxygen and two suction outlets. Each labor room shall contain a hand-washing station and shall have direct access to a toilet room. One toilet room may serve two labor rooms. Labor rooms shall be closely served by facilities for medication, charting, and storage for supplies and equipment. At least one shower for use of labor room patients shall be provided. A water closet shall be accessible to shower facility. Windows, if provided, shall be located, draped or otherwise arranged, to preserve patient privacy from observation from outside.
- (e) Recovery room. It shall contain not less than two beds, charting facilities located to permit staff to have visual control of all beds, facilities for medicine dispensing, hand-washing stations at a rate of one per four beds or a minimum of one, clinical sink with bedpan flushing device, and storage for supplies and equipment. The recovery room may be omitted in hospitals with fewer than 300 annual births.
- (3) Service Areas. Individual rooms shall be provided as indicated in the following standards. Otherwise, alcoves or other open spaces that do not interfere with traffic may be used. Services, except the father's waiting room mentioned in subsection (c) of this section, soiled workroom in subsection (g) of this section, and the housekeeping closet in subsection (p) of this section, may be shared with the surgical facilities if the Functional Program reflects this concept. Where shared, areas shall be arranged to avoid direct traffic between the delivery and operating rooms. The following services shall be provided:
- (a) Control station located to permit visual surveillance of all traffic that enters the obstetrical suite.
 - (b) Supervisor's office or station.
 - (c) Fathers' waiting room located convenient to the labor room area with provisions for personal communication between fathers and staff. Toilets, telephones, and drinking fountains shall be convenient to the waiting room. In hospitals with less than 300

deliveries per year, a separate fathers' waiting room is not required when a general purpose waiting area can be made available.

(d) Sterilizing facility(ies) with high speed autoclave(s) conveniently located to serve all delivery rooms. When a written program indicates that adequate provisions have been made for replacement of sterile instruments during a delivery, sterilizing facilities in the obstetrical suite will not be required.

(e) Drug distribution station. Provision shall be made for storage, preparation, and dispensing of medication.

(f) Scrub facilities. Two scrub stations shall be provided near the entrance to each delivery room; however, two scrub stations may serve two delivery rooms if the scrub stations are located adjacent to the entrance of each delivery room. Scrub facilities shall be arranged to minimize any incidental splatter on nearby personnel or supply carts.

(g) An enclosed soiled utility room for the exclusive use of the obstetrical suite staff or a soiled holding room that is part of a system for the collection and disposal of soiled materials. The soiled utility room shall contain a clinical sink or equivalent flushing type fixture, work counter, a hand-washing station, waste receptacle, and linen receptacle. If a soiled holding room is used, the hand-washing station and work counter may be omitted. Soiled utility and/or holding areas shall not have a direct connection with delivery rooms or other sterile activities.

(h) Fluid waste disposal facilities shall be provided in a location convenient to but not connected with the delivery rooms. (The clinical sink or equivalent equipment in a soiled utility room or soiled holding room would meet this standard.) See OAR 333-535-0260(5) for sanitary references.

(i) Clean utility room(s) or clean supply room(s). A clean utility room is required when clean materials are assembled within the obstetrical suite prior to use. A clean utility room shall contain a work counter, a hand-washing station, and space for clean and sterile supplies. A clean supply room shall be provided when the program defines a system for the storage and distribution of clean and sterile supplies that would not require the use of a clean utility room. When clean supplies and equipment used in LDR and LDRP rooms are kept in a central location, the room shall be sized to reflect this concept. (A clean utility room or supply room may be shared with surgery department when provisions for joint use are included in the hospital's infection control policy and arrangement allows direct access to both delivery and surgery suites.).

(j) Anesthesia storage facilities. Unless the narrative program and official hospital board action in writing prohibit use of flammable anesthetics, a separate room shall be provided for storage of flammable gases in accordance with the requirements detailed under the mechanical section of these rules (OAR 333-535-0300). (Anesthesia storage facilities may also serve the surgery suite when provision is made for direct access from both surgery and delivery suites.).

(k) Anesthesia utility room or space for cleaning, testing, and storing anesthesia equipment. It shall contain a work counter, sink, and provisions for separation of clean and soiled items. This may occur at a location outside the suite, provided that sufficient clean equipment and supplies are available at all times. The anesthesia utility room may be omitted when a narrative statement and hospital board policy are submitted stating that no anesthetics are utilized.

(l) Equipment storage room(s) for equipment and supplies used in obstetrical suite.

(m) Staff's clothing change areas. Appropriate areas shall be provided for male and female personnel (technicians, nurses, aides, and doctors) working within the obstetrical suite. The areas shall contain lockers, showers, toilets, hand-washing stations, and space for donning scrub apparel. A receptacle for discarding soiled surgical gowns and boots shall be located to minimize contact with clean personnel. (The same clothes change areas may serve the surgery suite when provision for joint use is included in the hospital's infection control policy and arrangement allows for direct access from both surgery and delivery suites.).

(n) Lounge and toilet facilities for obstetrical staff convenient to delivery, labor, recovery, LDR and LDRP rooms. A separate lounge may be omitted, however, in hospitals with less than 300 deliveries per year.

(o) Facilities for physician waiting, charting, and sleeping are recommended where the obstetrical staffing program and workload indicate need for such, but are not required.

(p) Housekeeping closet. A dedicated closet containing a floor receptor or service sink, in accordance with OAR 333-535-0260(7), and storage space for housekeeping supplies and equipment shall be provided exclusively for the obstetrical suite.

(q) Stretcher storage area. This area shall be out of direct line of traffic.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0130

Rehabilitation Therapy Department

(1) If a formal rehabilitation therapy service is provided, facilities and equipment shall be required for the effective function of the program. Where two or more rehabilitative services are included, items may be shared between service elements, in accordance with the Functional Program.

(2) The rehabilitative therapy department shall include the following, which may be shared or provided as separate units for each service, in accordance with the Functional Program:

(a) Office space with provision for filing and retrieval of patient records;

(b) Patient waiting space with provisions for wheelchairs out of traffic;

(c) Treatment area(s) as programmed for thermo-therapy, diathermy, ultrasonic and hydrotherapy. Cubicle curtains shall be provided around each individual treatment area. Hand-washing stations shall be provided at a rate of one per four treatment spaces.

Facilities for collection of wet and soiled linen and other materials shall be provided;

(d) Exercise area;

(e) Storage for clean linen, supplies, and equipment;

(f) Patient dressing areas and toilet rooms with hand-washing stations accessible to wheelchair patients;

(g) A conveniently accessible housekeeping closet and service sink;

(h) Wheelchair and stretcher storage shall be provided out of traffic and treatment space areas, but shall be conveniently located;

(i) Secure storage shall be available to the department for staff personal property;

(j) Convenient access to toilets shall be provided.

Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0140

Occupational Therapy Suite

The occupational therapy suite shall include the following elements:

- (1) Office space.
- (2) Activities area. A hand-washing station shall be provided. Facilities for collection of waste products prior to disposal shall be provided, in accordance with the Functional Program.
- (3) Storage for supplies and equipment.
- (4) Ready access to patient toilet facilities.

Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0150

Respiratory Therapy Unit

The respiratory therapy unit shall include space to accommodate program needs and shall contain the following additional elements:

- (1) Office space including records file.
- (2) Storage for supplies and equipment.
- (3) Equipment servicing area.

Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0160

Morgue and Autopsy

- (1) These facilities shall be directly accessible to an outside entrance and shall be located to avoid transfer of cadavers through public areas.
- (2) The following elements shall be provided when autopsies are performed within the hospital:
 - (a) Refrigerated facilities for body-holding equipped with temperature monitoring and alarms.
 - (b) Autopsy room. This room shall contain:
 - (A) Work counter with a hand-washing station;
 - (B) Storage space for supplies, equipment, and specimens;
 - (C) Autopsy table;
 - (D) Clothing change area with shower, toilet, and lockers, within the area; and
 - (E) Housekeeping service sink or receptacle.
- (3) If autopsies are performed outside the facility, only a well-ventilated body-holding room need be provided within the hospital.

Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0170

Pharmacy Suite

(1) The size and type of services to be provided in the pharmacy will depend upon the type of drug distribution system to be used in the hospital and whether the hospital proposes to provide, purchase, or share pharmacy services with other hospitals or other medical facilities.

(2) Provision shall be made for the following functional areas:

(a) Hand-washing stations shall be provided within each separate room where open medication is prepared for administration;

(b) Dispensing area;

(c) Editing or order review area;

(d) Sterile products area. (For the compounding of IV admixtures and other sterile products. May also be used for extemporaneous compounding). If intravenous (IV) solutions are prepared in the pharmacy, a sterile work area with a laminar-flow workstation designed for product protection shall be provided. See OAR 333-535-0300;

(e) Administrative areas. (Office area for the chief pharmacist and any other offices required for the proper maintenance of records and reports and also for purchasing, accounting, and personnel activities.);

(f) Storage areas (bulk, active, refrigeration, vault, volatile liquids);

(g) Drug information area;

(h) Packaging area. (Provide only if required by program.);

(i) Bulk compounding area. (Provide only if required by program.); and

(j) Quality control area. (Required only if either packaging or bulk compounding areas are provided)

(3) The pharmacy suite shall be in conformance with statutes and administrative rules pertaining to the State Board of Pharmacy.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0180

Dietary Facilities

(1) Food service facilities may consist of an on-site conventional food preparing system, a convenience food service system, or an appropriate combination of the two, and shall meet the requirements of the Oregon Food Sanitation Rules OAR 333-150-0000.

(2) Functional elements. The following facilities shall be provided in the size required to implement the type of food service selected:

(a) Control station for receiving food supplies.

(b) Storage space for four days' supply including food requiring cold storage.

(c) Food preparation facilities. Conventional food preparation systems require space and equipment for preparing, cooking, and baking. Convenience food service systems such as frozen prepared meals, bulk packaged entrees, and individual packaged portions, or systems using contractual commissary services require space and equipment for thawing, portioning, cooking, and/or baking.

(d) Hand-washing stations located in the food preparation area.

(e) Patients' meal service facilities. Examples are those required for tray assembly and distribution.

(f) Dining space for ambulatory patients, staff, and visitors.

(g) Ware-washing space located in a room or an alcove separate from food preparation and serving area. Commercial-type dishwashing equipment shall be provided. Space shall also be provided for receiving, scraping, sorting, and stacking soiled tableware and for transferring clean tableware to the using areas. A hand-washing station shall be conveniently available.

(h) Pot-washing facilities.

(i) Storage areas and sanitizing facilities for cans, carts, and mobile tray conveyors.

(j) Waste storage facilities located in a separate room easily accessible to the outside for direct pickup and disposal.

(k) Office(s) or desk spaces for dietitian(s) or the dietary service manager.

(l) Toilets for dietary staff. A hand-washing station shall be immediately available.

(m) Housekeeping closet. Located within the dietary department and shall contain a floor receptor or service sink and storage space for housekeeping, equipment and supplies.

(n) Self-dispensing ice-making facilities. May be in area or room separate from food preparation area but must be easily cleanable and convenient to dietary facilities.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0190

Administration and Public Areas

The following areas shall be provided:

(1) Entrance at grade level, sheltered from the weather, and able to accommodate wheelchairs.

(2) Lobby. It shall include:

(a) Storage space for wheelchairs;

(b) Reception and information counter or desk;

(c) Waiting space(s);

(d) Public toilet facilities;

(e) Public telephones; and

(f) Drinking fountain(s).

(3) Interview space(s) for private interviews relating to social service, credit, and admissions.

(4) General or individual office(s) for business transactions, medical and financial records, and administrative and professional staffs.

(5) Multipurpose room(s) for conferences, meetings, and health education purposes including provisions for showing visual aids.

(6) Library facilities.

(7) Storage for office equipment and supplies.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0200

Medical Records Unit

The following rooms and areas shall be provided:

(1) Medical records administrator/technician office or space.

(2) Review and dictating room(s) or spaces.

(3) Work area for sorting, recording, or archiving records.

(4) Storage area for records.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0205

Central Services Supply

The following shall be provided:

(1) Soiled utility room. This room shall be physically separated from all other areas of the department. The work space shall be provided to handle the cleaning and initial sterilization/disinfection of all medical/surgical instruments and equipment. Work tables, sinks, flush-type devices, and washer/sterilizer decontaminators shall be provided. Hand-washing stations shall be provided. Lockers, showers, and toilets shall be provided for staff employed in this area if these facilities are not available in adjacent employee facilities servicing other soiled areas.

(2) Clean assembly/utility room. The utility room shall contain work space and equipment for terminal sterilizing medical and surgical equipment and supplies and hand-washing stations.

(a) A sterilization room shall be provided that is used exclusively for the inspection, assembly, and packaging of medical/surgical supplies and equipment for sterilization.

(A) Access to the sterilization room shall be restricted.

(B) This room shall contain Hi-Vacuum or gravity steam sterilizers and sterilization equipment to accommodate heat-sensitive equipment (ETO sterilizers) and ETO aerators.

(C) This room shall contain work tables, counters, a hand-washing station, ultrasonic storage facilities for backup supplies and instrumentation, and a drying cabinet or equipment.

(D) The area shall be designed to accommodate sterilizer carts for loading of prepared supplies for sterilization.

(3) Storage areas for clean supplies and for sterile supplies. A room for breakdown shall be provided for manufacturers' clean/sterile supplies. The clean processing area shall not be in this area but in an adjacent space.

(4) Equipment storage room. Storage for packs, etc., shall include provisions for ventilation, humidity, and temperature control.

(5) Cart storage. This area shall be adjacent and easily available to clean and sterile storage and close to the main distribution point to keep traffic to a minimum and ease workflow.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0210

General Stores

The following shall be provided:

(1) Off street unloading facilities.

(2) Receiving area. Adequate receiving areas shall be provided to accommodate delivery trucks and other vehicles.

- (a) The location of the receiving area shall be located to promote safe, secure, and efficient movement of arriving materials without compromising patient areas.
- (A) Dock areas shall be segregated from other occupied building areas and located so that noise and odors from operation will not adversely affect building occupants.
- (B) The receiving area shall be convenient to service elevators and other internal corridor systems.
- (C) Receiving areas shall be segregated from waste staging and other outgoing materials-handling functions.
- (b) Space requirements shall be adequate to enable breakdown, sorting, and staging of incoming materials and supplies.
- (A) Balers and other devices shall be located to capture packaging for recycling or return to manufacturer or deliverer.
- (B) In facilities with centralized warehousing, adequate space shall be provided at receiving points to permit the staging of reusable transport containers for supplies moving from central warehouses to individual receiving sites.
- (3) General storage rooms or storage system shall be provided to meet hospital needs. They shall generally be concentrated in one area, but, in a multiple building complex, they may be in separate concentrated areas in one or more individual buildings on site. Off-site locations for a portion of this storage shall be permitted. The following shall be provided:
 - (a) Provisions for protection against inclement weather during transfer of supplies.
 - (b) General storage room(s) with a total area of not less than 20 square feet per inpatient bed shall be provided.
 - (c) Additional storage areas for outpatient facilities in combination with and in addition to the general stores, or in a central area within the outpatient department shall be permitted. Off-site location(s) for a portion of this storage shall also be permitted.
 - (d) Additional storage areas for outpatient facilities shall be provided in an amount not less than five percent of the total area of those facilities.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0220

Linen Services

- (1) On-site processing. If linen is to be processed on the hospital site, the following shall be provided:
 - (a) Laundry processing room with commercial-type equipment that can process seven days' needs within a regularly scheduled workweek. A hand-washing station shall be provided;
 - (b) Soiled linen utility, room with a hand-washing station and holding rooms. Lockers, showers, and toilets shall be provided for staff employed in this area if these facilities are not available in adjacent employee facilities servicing other soiled areas;
 - (c) Storage for laundry supplies;
 - (d) Clean linen inspection and mending room or area;
 - (e) Clean linen storage, issuing, and holding room or area;
 - (f) Housekeeping closet containing a floor receptor or service sink and storage space for housekeeping equipment and supplies;

- (g) Cart storage area(s). These shall be provided for separate parking of clean- and soiled-linen carts out of traffic;
 - (h) Arrangement of equipment and procedures shall be in a manner to permit orderly work flow with a minimum of cross-traffic that might mix clean and soiled operations.
- (2) Off-site processing. If linen is processed off the hospital site, the following shall be provided:
- (a) Soiled linen holding room. A separate room shall be provided for holding soiled linen until ready for pickup or processing;
 - (b) Clean linen receiving, holding, inspection, and storage room(s). A central clean linen storage and issuing room(s) shall be provided in addition to the linen storage required at individual patient units;
 - (c) Cart storage area(s). These shall be provided for separate parking of clean- and soiled-linen carts out of traffic.
- Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0230

Employees' Facilities

In addition to the employees' facilities such as locker rooms, lounges, toilets, or shower facilities called for in certain departments, a sufficient number of such facilities, as required to accommodate the needs of all personnel and volunteers, shall be provided in accordance with the Functional Program.

Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0250

Waste Processing Services

- (1) Storage and disposal. Space and facilities shall be provided for the sanitary storage and disposal of waste by incineration, mechanical destruction, compaction, containerization, removal, or by a combination of these techniques.
- (2) Incinerator:
 - (a) Design and construction of incinerators and trash chutes shall be in accordance with NFPA 82 and State Structural and Mechanical Codes.
 - (b) Incinerators shall be designed and equipped to conform to requirements prescribed by the Oregon Department of Environmental Quality for emission levels and equipment.
 - (c) Other technologies for non-incineration. Waste treatment technologies shall be determined by the facility in conjunction with environmental, economic, and regulatory considerations. The Functional Program shall describe waste treatment technology components that include the following:
 - (A) Safe locations, transfer routes, distances from waste sources, temporary storage and spacing requirements shall be provided that will not cause traffic problems, and limits odor, noise, and visual impact to patients, visitors and the public;
 - (B) Space shall be determined by the equipment requirements, including associated area for opening waste entry doors, access to control panels, space for hydraulic lifts, conveyors, and operational clearances. The method of waste treatment or disposal is subject to the local regulatory approvals;

(C) Ventilation. Exhaust vents, if any, from the treatment technology shall be located a minimum of 25 feet from inlets to HVAC systems. If technology involves heat dissipation, sufficient cooling and ventilation shall be provided; and
(D) Nuclear Waste Disposal. See Code of Federal Regulations (CFR), Title X, parts 20 and 35, concerning the handling and disposal of nuclear materials in health care facilities.
Stat. Auth.: ORS 441.060
Stats. Implemented: ORS 441.060

333-535-0260

Sanitary Environment

(1) A hand-washing station is an area providing a sink for hand-washing with hot and cold water supply and a faucet that facilitates easy on and off mixing capabilities without use of the hands. The station shall include provision of cleansing agents and drying capability. In addition to hand-washing stations required for individual departments, adequate hand-washing stations shall be provided for the total hospital population. Hand-washing stations shall be available in all toilet rooms. For the purpose of providing accuracy and consistency within these rules, these terms are defined as follows:

(a) Hand-washing sink. Hand-washing sinks are a general component of hand-washing stations that are available in all toilet rooms and provided for the total hospital population.

(b) Scrub sink. Scrub sinks are provided for the exclusive use of staff in restricted and semi-restricted locations within operating and surgical suites and rooms.

(2) Toilet and hand-washing stations shall be available to patient care units as follows, with the exception of intensive patient care units and special locked psychiatric units where provision of these fixtures within the room may pose undue risks or problems:

(a) In newly constructed single patient rooms having a private toilet room, a hand-washing station in both the toilet room and the patient room shall be provided. For renovation projects involving single patient rooms that have a private toilet room, a hand-washing station shall be located in either the toilet room or the patient room;

(b) In single patient rooms having a toilet room connecting two rooms, a hand-washing station shall be provided in the toilet room and in each of the two patient rooms;

(c) All wards of two or more beds, having a separate or connecting toilet rooms shall have a hand-washing station in the toilet room as well as in the ward;

(d) A toilet room shall be directly accessible from each patient room without going through the general corridor;

(e) One toilet room shall serve not more than four patients or two patient rooms; and

(f) In general psychiatric units, the hand-washing station may be omitted from the patient room when a hand-washing station is located in an adjoining toilet room. Toilet and hand-washing stations in special-care, locked psychiatric units may be provided based on patients' needs and the Patient and Staff Safety Assessment.

(3) Toilet rooms, conveniently located and separate from those used by patients, shall be provided for all hospital personnel. No toilet room shall open directly into any room in which food, drink, or utensils are handled or stored.

(4) Clean utility or clean storage: Each patient care unit shall include or have direct access to a clean utility room or area open to the corridor containing a work counter, hand-washing station and facilities for storage and distribution of clean and sterile supply

materials. If the room is used for clean storage only, the hand-washing sink may be omitted. If the utility area is open to the corridor, all supply cabinets shall be fully enclosed.

(5) Soiled utility or soiled holding: Each patient care unit shall include or have direct access to a soiled utility room or a soiled holding room as required in other related sections.

(a) Soiled utility rooms shall contain a clinical sink or equivalent flushing rim sink. Where a bed pan flushing device is provided in patient toilet rooms, a utility sink may be provided in the soiled utility room instead of a clinical sink. The utility sink shall be at least 10 inches deep and measure at least 22 inches by 21 inches. Each soiled utility room shall also provide a hand-washing station, work counter, waste receptacle and linen receptacle for collection and disposal of soiled materials, including separate infectious waste storage if not provided elsewhere, and recycle storage if part of hospital operations.

(b) Soiled holding rooms. Soiled holding rooms are intended for temporary holding of soiled material. Clinical sinks and work counters are not required in rooms used only for temporary holding of soiled material. If the flushing-rim clinical sink is not provided, facilities for cleaning bedpans shall be provided elsewhere.

(6) Patients' bathing facilities for medical, surgical, obstetrical, and pediatric patient care units: at least one shower or tub for each 12 beds shall be provided, except that in postpartum units, a minimum of one shower per 12 beds shall be provided. Each tub or shower shall be in an individual room or enclosure that provides space for the private use of the bathing fixture and for drying and dressing. At least one bathing fixture on each patient floor shall have space for a wheelchair with an assisting attendant. In new construction, at least one toilet for each 12 beds shall be provided in the bathing room. Patient/public toilets shall be provided conveniently near multi-purpose rooms.

(7) Housekeeping closets. In addition to closets noted in other sections of these rules, sufficient housekeeping closets, with a floor sink or service sink and storage space for janitorial equipment, cart and supplies, located in each, shall be provided to serve all areas of the hospital and shall also include the following:

- (a) A minimum of 35 square feet shall be provided for each housekeeping room;
- (b) A minimum of one housekeeping closet shall be provided for each floor; and
- (c) If practical, a hand-washing station shall be provided proximate to the housekeeping closet.

(8) Overhead drainage piping. Refer to OAR 333-535-0300(5)(e)(C).

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0270

Details and Finishes

(1) The nonconforming portions of existing facilities that are not being totally modernized shall comply with the safety requirements dealing with interior finishes as listed in chapters 18, 19, 20 and 21 of the National Fire Protection Association (NFPA) 101, when the facility is also to be Medicare or Medicaid certified.

(2) Details and finishes in new construction projects, including additions and major alterations, shall comply with the following:

(a) Details:

- (A) Compartmentation, exits, fire alarms, automatic extinguishing system, and other details relating to fire prevention and fire protection shall comply with requirements listed in chapters 18, 19, 20 and 21 of the NFPA101, when the facility is also to be Medicare or Medicaid certified.
- (B) Items such as drinking fountains, telephone booths, vending machines, and portable equipment shall be located so as not to restrict corridor traffic or reduce the corridor width below the required minimum.
- (C) Rooms containing any of the following: bathtubs, sitz baths, showers, or water closets, subject to occupancy by patients, shall be equipped with doors and hardware that will permit access from the outside in any emergency. When such rooms have only one opening, the door shall be capable of opening outward or be otherwise designed to be opened without need to push against a patient who may have collapsed within the room.
- (D) If psychiatric care units are required by the program, suitable hardware shall be provided on doors to patient toilet rooms so that access to these rooms can be controlled by staff.
- (E) If required by the program, doors to patient rooms in psychiatric care units shall not be lockable from inside the room.
- (F) Windows and other doors that may be frequently left in an open position shall be provided with insect screens.
- (G) Patient rooms intended for occupancy of 24 hours or more shall have windows with sills not more than 3 feet above the floor (windows in Intensive Care Unit and Critical Care Unit may be 5 feet above the floor).
- (H) Linen and refuse chutes shall meet requirements of NFPA101, and have a minimum cross sectional dimension of not less than 2 feet.
- (I) Thresholds and expansion joint covers shall be made flush with the floor surface to facilitate use of wheelchairs and carts. Expansion joints shall be constructed to restrict passage of smoke and fire.
- (J) Grab bars shall be provided at all patients' toilets, showers, tubs, and sitz baths, except in psychiatric patient care units. The bars shall have one and one-half inch clearance to walls and shall have sufficient strength and anchorage to sustain a concentrated load of 250 pounds.
- (K) Anchoring. Sinks in hand-washing stations shall be securely anchored to withstand an applied vertical load of not less than 250 pounds on the fixture front.
- (L) Mirrors shall not be installed at hand-washing stations in food preparation areas or in sensitive areas such as nurseries, clean and sterile utility, storage rooms and scrub sinks.
- (M) Hand drying devices. Provision for hand drying shall be included at all hand-washing stations except scrub sinks. Hospital policy shall determine hand drying procedures at scrub sink locations. These shall be single use separate individual paper or cloth units enclosed in such a way as to provide protection against dust or soil and insure single unit dispensing. Hot air dryers are permitted provided that installation is such to preclude possible contamination by recirculation of air.
- (N) Radiation protection requirements for Radiographic Imaging and gamma ray installations shall be in accordance with National Council of Radiation Protection Reports Numbers 33 and 49. Provision shall be made for testing the completed installation before use and all defects must be corrected before acceptance. Prior to their

use, all installations shall be approved and licensed by the Radiation Control Section of the Department of Human Services, Public Health Division.

(O) The minimum ceiling height shall be 7 feet 10 inches with the following exceptions:

(i) Boiler rooms shall have ceiling clearances not less than 2 feet 6 inches above the main boiler header and connecting piping.

(ii) Radiographic, operating and delivery rooms, and other rooms containing ceiling-mounted equipment or ceiling-mounted surgical light fixtures shall have height required to accommodate the equipment or fixtures.

(iii) Ceilings in corridors, storage, toilet rooms, and other minor rooms shall be not less than 7 feet 6 inches.

(iv) Soffits, signage, lights, mechanical items and other suspended items located in the path of normal traffic shall not be less than 7 feet above the floor. Cubicle curtain tracks and television suspensions in individual rooms shall not be less than 6 feet 8 inches above the floor.

(P) Recreation rooms, exercise rooms and similar space where impact noises may be generated shall not be located directly over patient bed area, delivery or operating suites, unless special provisions are made to minimize such noise.

(Q) Rooms containing heat-producing equipment (such as boiler or heater rooms and laundries) shall be insulated and ventilated to prevent any floor surface above from exceeding a temperature of 10°F above the ambient room temperature of the room producing the heat generation.

(R) Sound transmission criteria shown in Table 1 (OAR 333-535-0270) shall apply to partition, floor and ceiling construction in patient areas.

(S) Mechanical equipment located on the same floor or above patient rooms, offices, nurse stations, and similar occupied spaces shall be effectively sound isolated from the floor and structure.

(T) Equipment and supply storage shall be provided for each hospital department in accordance with the Functional Program; however, a minimum of 10 square feet per bed shall be provided in patient care areas. In all other departments, the amount required shall be based on either a study of supply and equipment needs which shall be submitted with construction plans for review or a minimum of 10 percent of gross departmental area. All rooms and corridors within a department shall be included when calculating gross departmental area.

(b) Finishes:

(A) Cubicle curtains and draperies shall be noncombustible or rendered flame retardant and shall pass both the large and small scale tests of NFPA Standard 701.

(B) Flame spread and smoke developed ratings of finishes are covered under the State of Oregon Building Code. Whenever possible, the use of materials known to produce large amounts of noxious gases shall be avoided.

(C) Floor materials shall be easily cleanable and have wear resistance appropriate for the location involved. Floors in areas used for food preparation or food assembly shall be water-resistant and grease-proof. Joints in tile and similar material in such areas shall be resistant to food acids. In all areas frequently subject to wet cleaning methods, floor materials shall not be physically affected by germicidal and cleaning solutions. Floors that are subject to traffic while wet (such as shower and bath areas, kitchens, operating and C-section rooms, clean core areas, recovery areas except step-down recovery and

similar work areas) shall have a non-slip surface as recommended by Americans with Disabilities Act, Architectural and Transportation Barriers Compliance Board (Access Board).

(D) Wall bases in kitchens, operating and C-section rooms, clean core areas, surgical scrub corridors, soiled workrooms, endoscopy rooms, housekeeping closets and other areas that are frequently subject to wet cleaning methods shall be made integral and coved with the floor, tightly sealed to the wall, and constructed without voids that can harbor insects.

(E) Wall finishes shall be washable and, in the immediate area of plumbing fixtures, shall be smooth and moisture resistant (orange peel not allowed). Finish, trim, and floor and wall construction in dietary and food preparation areas shall be free from spaces that can harbor rodents and insects.

(F) Floor and wall penetrations by pipes, ducts, and conduits shall be tightly sealed to minimize entry of rodents and insects. Joints of structural elements shall be similarly sealed.

(G) Ceilings in restricted areas such as: surgery rooms, delivery rooms, clean core areas and specialized radiographic rooms shall be constructed with material that are monolithic, scrubbable, and capable of withstanding chemicals, such as gypsum board, and be without crevices that can contain dirt particles.

(H) Ceilings in semi-restricted areas such as: airborne infection isolation rooms, protective environment rooms and central sterile supply spaces shall be smooth, scrubbable, nonabsorptive, nonperforated, capable of withstanding cleaning with chemicals, and without crevices that can harbor mold and bacterial growth.

(I) If lay-in ceiling is provided in semi-restricted areas, it shall be gasketed or clipped down to prevent the passage of particles from the cavity above the ceiling plane into the semi-restricted environment. Perforated, tegular, serrated cut, or highly textured tiles are not acceptable.

(J) Dietary and food preparation areas shall have a finished ceiling covering all overhead duct work and piping.

(K) Finished ceilings may be omitted in general storage areas, and similar spaces, unless required for fire-resistive purposes.

(L) Acoustical ceilings shall be provided for corridors in patient areas, nurses' stations, labor rooms, day rooms, recreation rooms, dining areas, and waiting areas.

(M) In dietary areas and in other areas where dust fallout may present a problem, suspended ceilings shall be provided.

(N) Ceilings of patient rooms in psychiatric care units shall be of monolithic or bonded construction.

(O) Top-set rubber or vinyl wall base, where used, shall be sealed tightly to the floor as well as to the wall.

[ED. NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0280

Construction, Including Fire-Resistive Requirements

Construction shall be in accordance with the requirements of **NFPA 99 and NFPA 101**, the **Oregon Structural Specialty Code**, and **Oregon Fire Code**, and the minimum requirements contained herein.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0290

Elevators

(1) General. All hospitals having patients' facilities (such as bedrooms, dining rooms, or recreation areas) or critical services (such as operating, delivery, diagnostic, or therapy) located on floors other than the main entrance floor shall have electric or electro-hydraulic elevators. Installation and testing of elevators shall comply with the Oregon Elevator Code.

(2) Number of Elevators:

(a) At least one hospital-type elevator shall be installed where 1 to 59 patient beds are located on any floor other than the main entrance floor.

(b) At least two hospital-type elevators shall be installed where 60 to 200 patient beds are located on floors other than the main entrance floor, or where the major inpatient services are located on a floor other than those containing patient beds. (Elevator service may be reduced for those floors that provide only partial inpatient services.)

(c) At least three hospital-type elevators shall be installed where 201 to 350 patient beds are located on floors other than the main entrance floor, or where the major inpatient services are located on a floor other than those containing patient beds. (Elevator service may be reduced for those floors that provide only partial inpatient services.)

(d) For hospitals with more than 350 beds, the number of elevators shall be determined from a study of the hospital plan and the estimated vertical transportation requirements.

(3) Cars and platforms. Cars of hospital-type elevators shall have inside dimensions that will accommodate all patient beds to be utilized and attendants. The car door shall have a clear opening of not less than 4 feet.

(4) Operation. Elevators, except freight elevators, shall be equipped with a two-way special service switch to permit cars to bypass all landing button calls and be dispatched directly to any floor.

(5) Elevator controls, alarm buttons, and telephone shall be accessible to wheelchair occupants.

(6) Elevator call buttons, controls, and door safety stops shall be of a type that will not be activated by heat or smoke.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0300

Mechanical Requirements

(1) General standards:

(a) In addition to requirements of this rule, the mechanical system serving hospitals and hospital outpatient facilities may be subject to general review for overall efficiency and life cycle cost, although no requirements will be enforced beyond those included in this rule. Recognized engineering procedures are recommended to achieve specific

requirements and performance for the most economical and effective results. Different geographic areas may have climate variations and use conditions that would favor one system over another in terms of overall cost and efficiency. In no case shall patient care or safety be sacrificed for conservation. Construction shall comply with the Oregon Structural Specialty Code (OSSC), the Oregon Mechanical Specialty Code (OMSC), the Oregon Plumbing Specialty Code (OPSC), Oregon Fire Code (OFC), NFPA 90A, and NFPA 99 Health Care Facilities as enforced by the State Building Codes Division and Authorities having Jurisdiction. Responsibility for enforcement remains with these authorities.

(b) The facility shall include provisions for recovery of waste cooling and heating energy (ventilation, exhaust, water and steam discharge, cooling towers, incinerators, etc.) in compliance with local codes.

(c) Recirculating room units (such as induction units and unit ventilators) may be used in individual rooms for heating and cooling purposes. Outdoor air requirements shall be met by separate air handling systems with proper filtration, as noted in Table 3.

(d) To reduce utility costs, facility design shall include consideration of recognized procedures such as variable air volume systems, energy recovery devices, load shedding, programmed controls for unoccupied periods including nights and weekends, and use of natural ventilation where site and climatic conditions permit. Systems with excessive operational or maintenance costs that would negate long-range energy savings should be avoided.

(e) To the extent possible, this rule has been written to permit maximum use of simplified systems including that for variable air volume (VAV). However, care must be taken in design to avoid possibility of large temperature differentials, high velocity supply, excessive noise, and stagnation. Air supply, return, and exhaust in rooms may vary in response to room load provided the total and outside air change rates stay within the limits of Table 2, Note 4. Construction drawing submissions shall include information listing the actual supply air and outside air change rates provided to the areas listed in Table 2 at maximum and minimum terminal unit settings.

(f) To maintain asepsis control, air supply, return, and exhaust quantities should generally be controlled to ensure movement from "clean" to "less clean" areas and maintain directional air movement within the limits of Table 2, Note 2. Special considerations shall be given to sterile areas such as Operating Rooms, Delivery Rooms, and Central Supply.

(g) Variable air volume systems serving inpatient facilities or surgical outpatient facilities shall include controls or equipment necessary to ensure that minimum outside air quantities in cubic feet per minute and the resulting space pressure relationships are maintained over the range of fan operation. Examples of methods to ensure the delivery of minimum quantities of outside air include the installation of airflow monitoring stations or dedicated supply fans.

(h) Prior to acceptance of the facility, all mechanical systems shall be tested, balanced and operated to demonstrate to the design engineer or his or her representative that the installation and performance of these systems conform to the design intent and requirements herein. Test results shall be documented for maintenance files and be available for inspection by Division's surveyors or Authorities having Jurisdiction.

(i) Functional performance tests shall be provided for projects that include the addition or modification of major equipment and systems. These tests shall ensure that mechanical systems operate in accordance with the design intent and in compliance with requirements herein. Description of procedures and test results for each functional performance test shall be documented to demonstrate to the design engineer, or his or her representative, that systems operate in accordance with the design intent. Documentation shall be included in the maintenance files and be available for inspection by the Division's surveyors or Authorities having Jurisdiction. Functional performance tests shall be developed and performed for the following systems and system functions in hospital inpatient facilities where applicable:

(A) Outdoor air ventilation system components and control modes.

(B) Humidity control components and control modes.

(C) Maintenance of space pressure relationships through all modes of air handling system operation.

(D) Airborne infectious isolation and protective environment room ventilation and pressurization monitoring systems.

(E) Smoke evacuation systems serving anesthetizing areas.

(F) Fire/smoke damper controls.

(G) Boiler and generator fuel oil supply transfer systems including alarms.

(H) Laboratory hood systems.

(j) Upon completion of the contract, the facility shall be furnished and retain on file a complete set of building drawings, manufacturers' operating, maintenance and preventive maintenance instructions, parts lists and procurement information with model numbers, and a description of the operation of each piece of equipment. Responsible operating staff persons shall also be provided with instructions in the proper operational use of systems, equipment, and controls. This information shall be available for inspection by the Division's surveyors or Authorities having Jurisdiction.

(k) If inpatient facility system modifications affect greater than 25 percent of the system capacity, designers shall obtain and utilize pre-renovation water/air flow rate measurements to verify that sufficient capacity is available and that renovations have not adversely affected flow rates in non-renovated areas.

(l) Psychiatric patient room fixtures and equipment shall be tamper resistant and shall be selected to meet the requirements of the Patient and Staff Safety Assessment. Equipment shall be selected to minimize the need for maintenance within the room. Refer to OAR 333-535-0061 for additional requirements.

(m) Identification. All piping, including heating ventilation, gas, vacuum and air conditioning (HVAC) except control line tubing, shall be color coded or otherwise marked for easy identification. Major equipment shall be labeled. All valves shall be tagged. Identification and valve schedules shall be provided to the facility for permanent record and reference.

(2) Insulation:

(a) Insulation shall be provided within the building to conserve energy, protect personnel, prevent vapor condensation, and reduce noise.

(b) Insulation on cold surfaces shall include an exterior vapor barrier. (Materials which will not absorb or transmit moisture will not require a separate vapor barrier.)

(c) Insulation, including finishes and adhesives on the exterior surfaces of ducts, piping, and equipment, shall have a flame spread rating of 25 or less and a smoke developed rating not to exceed 50 when tested in accordance with NFPA 255.

(d) If duct lining is used, it shall be coated and sealed and shall meet ASTM C1071. These linings, including coatings, adhesives, and insulation on pipes and ducts in building spaces, shall have a flame spread rating of 25 or less and a smoke developed rating of 50 or less when tested in accordance with NFPA 255.

(e) No duct linings exposed to air movement shall be used in ducts, terminal boxes or other systems downstream of final filters supplying operating rooms, invasive special procedure rooms, C-section delivery rooms, post anesthesia recovery rooms, critical care, nurseries, protective environment rooms, intensive care, and central supply areas. Fully encapsulated lining may be used in terminal boxes serving these areas. Sound traps or duct silencers downstream of final filters shall be all metal with no fill or shall have special coatings over such linings per ASTM C1071.

(f) If existing lined ductwork is reworked in a renovation project, the liner seams and punctures shall be resealed, repaired or replaced.

(3) Steam and hot water systems:

(a) Boilers and domestic water heaters. Boilers shall have the capacity, based upon the net ratings published by the Hydronics Institute, to supply the normal requirements of all systems and equipment. Their number and arrangement shall accommodate facility need during time of breakdown or routine maintenance of any one boiler. The capacity of the remaining boiler(s) shall be sufficient to provide domestic hot water service for clinical, dietary, and patient use; steam for sterilization and dietary purposes; and heating for operating, delivery, labor, recovery, intensive care, nursery, emergency departments, and general patient rooms. If the domestic water heating system is independent of the building heating boilers, the domestic water heating system shall be capable of providing a back-up source of domestic hot water for clinical, dietary, and sterilizer use when the primary domestic water heating system is not operable. These requirements do not apply to outpatient facilities except outpatient surgical facilities providing invasive or anesthetizing procedures shall provide backup equipment for hot water and sterilizer needs only.

(b) Boiler system accessories. Boiler feed pumps, heating circulating pumps, condensate return pumps, heat exchangers, and fuel oil pumps shall be connected and installed to provide normal and standby service where back-up or standby service is required.

(c) Valves. Supply and return mains and risers of cooling, heating and steam systems shall be valved to isolate the various sections of each system. Each piece of equipment shall be valved at the supply and return ends.

(d) Fuel supplies. Fuel used for boiler systems serving hospital inpatient facilities that provide building heating to the areas listed in subsection (3)(a) shall include a backup on-site fuel system if the primary fuel system fuel is not stored on site. The on-site fuel storage system shall have sufficient fuel/power to operate the boiler systems for a minimum of 48 hours, or for a time period consistent with the facility emergency management plan. The on-site fuel system shall include a low level fuel sensor alarmed at a staffed location. On-site fuel systems may be combined with the emergency generator fuel systems per the requirements of NFPA 110.

(4) Air conditioning, heating, and ventilating systems:

(a) The ventilation system shall be designed and balanced to provide ventilation rates and directional flow as shown in Table 2. (See notes 2 and 4 for reduction and shutdown of ventilation systems when room is unoccupied.) The ventilation rates shown in Table 2 shall be used only as model standards; they do not preclude the use of higher rates that may be appropriate. All occupiable rooms and areas in the facility shall have provision for mechanical ventilation. Natural ventilation systems and operable windows shall be permitted to supplement mechanical ventilation where they will not adversely affect required pressure relationships, air change rates, and room temperatures. Freestanding immediate care clinics, physician's clinics, imaging facilities, outpatient physical therapy, dialysis facilities, and occupational therapy facilities that are not part of an inpatient facility are not required to meet the ventilation requirements of Table 2, except endoscopy, isolation, and bronchoscopy areas.

(b) Outside air ventilation intakes shall be located at least 25 feet from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, plumbing vents, cooling towers, or from areas that may collect vehicular exhaust or other noxious fumes in all inpatient areas and in outpatient areas providing invasive or anesthetizing procedures. In non-anesthetizing hospital outpatient facilities, this distance may be reduced to 10 feet. Plumbing vents that terminate above the level of the top of the air intake may be located as close as 10 feet. Outside air ventilation intakes shall be located a minimum of 25 feet from the combustion vents of rooftop air handling units, except that the clearance may be reduced to 10 feet when the vent is above the level of the intake. Outside air ventilation intakes shall be located a minimum of 6 feet from relief/economizer air outlets that do not include required building exhaust. The bottom of outside ventilation air intakes in inpatient facilities shall be located as high as practical but at least 15 feet above ground level or 3 feet above the roof level.

(c) Fans serving exhaust systems shall be located at the discharge end of the system to limit positively pressurized ductwork within the building and shall be conveniently accessible for service. Where existing conditions prohibit fans from being located at the discharge end of the system, alternate systems may be considered provided discharge ductwork is sealed and tested per medium pressure duct requirements. Hospital outpatient facilities are not required to have exhaust fans at the discharge end of the system except endoscopy, isolation, and bronchoscopy area. Exhaust systems may be combined as necessary for efficient use of recovery devices required for energy conservation.

(d) Exhaust systems from areas that may be contaminated shall not be combined with other exhaust systems, shall include fans located outside the building with outlets discharging vertically a minimum of 6 feet above the roof level, and shall be arranged to minimize recirculation of exhaust air into the building. Consideration shall be given to redundant fan systems. Contaminated exhaust ducts and discharge points shall be labeled. Contaminated areas include infectious isolation, decontamination, ETO sterilizer, non-refrigerated body holding, and bronchoscopy. Contaminated exhaust shall not be served by exhaust systems that may allow cross contamination, such as heat wheels. Where existing conditions prohibit fans from being located outside the building, alternate systems that are designed to limit cross contamination and exposure to workers and patients may be considered. (Refer to OMSC for additional requirements.)

(e) Operating and C-section delivery room air supply shall be from ceiling outlets near the center of the work area to effectively control air movement. Laminar flow design

diffusers shall be used in operating rooms. Each operating and C-section delivery room shall have at least two return/exhaust air inlets located near the floor level in opposite corners of the room. (Design should consider turbulence and other factors of air movement to minimize fall of particles into wound site.) Where extraordinary procedures, such as organ transplants, may justify other special designs, the installation shall be as required to properly meet the performance needs. Special designs shall be reviewed on a case by case basis. Installation of equipment requiring service shall be kept to a minimum above operating rooms and sterile core areas. Temperature shall be individually controlled for each operating and C-section delivery room. The air handling systems for operating and C-section delivery rooms shall operate at all times.

(f) Humidity control and smoke vent systems in inpatient facility anesthetizing areas shall be provided as required by NFPA 99, Environmental Systems Chapter. Smoke vent systems shall prevent smoke within individual anesthetizing rooms from affecting adjacent anesthetizing rooms. Adjacent rooms shall remain at a positive pressure in relationship to the areas with detected smoke. Smoke dampers shall not affect the operation of the smoke vent system.

(g) Air supply for intensive care nurseries, airborne infectious isolation rooms, bronchoscopy treatment rooms, and rooms used for invasive procedures shall be at or near the ceiling. Return/exhaust air inlets shall be near the floor level. Special designs shall be reviewed on a case by case basis.

(h) Each airborne infectious isolation room and protective environment room shall have a permanently installed and labeled visual mechanism to constantly monitor the pressure status to the room when occupied by a patient requiring isolation or protection. The mechanism shall continuously monitor the direction of the air flow. Audible alarms, if provided, shall include a silencing switch. Rooms with reversible airflow provisions for the purpose of switching between airborne infectious and protective environment isolation rooms are not acceptable. Rooms used for sputum induction, aerosolized pentamidine treatments, or other cough inducing treatments shall meet the requirements of Table 2 for airborne infectious isolation rooms. Protective environment rooms shall be provided with HEPA filters at 99.97 percent efficiency (MERV 17) per Table 3. Recirculating HEPA filter units may be used in protective environment rooms, but shall not be used to meet the minimum filtering requirements of Table 3.

(i) The bottoms of ventilation (supply/return/exhaust) openings shall be at least 6 inches above the floor.

(j) Emergency waiting rooms and other waiting rooms where airborne infection is a concern, as defined by the Infection Control Risk Assessment, shall have low wall return/exhaust and shall conform to the requirements of Table 2. Special designs shall be reviewed on a case by case basis.

(k) Air handling systems in inpatient facilities shall be fully ducted except when serving non-patient care areas.

(l) All ventilation or air conditioning systems, except individual room units serving non-critical care areas, shall be equipped with filters having efficiencies equal to, or greater than, those specified in Table 3. Where two filter beds are required, filter bed No. 1 shall be located upstream of the air conditioning equipment, and filter bed No. 2 shall be downstream of any cooling coils and blowers. Non-central air handling systems

(individual room units) shall be equipped with filters with minimum 60 percent efficiency (MERV 11).

(A) Where only one filter bed is required, it shall be located upstream of the air conditioning coils unless an additional pre-filter is employed.

(B) Filter efficiencies shall be average ratings tested in accordance with American Society of Heating, Refrigeration, & Air Conditioning Engineering Standard 52-1 and MERVs rating shall be based on ASHRAE Standard 52-2, except as noted otherwise.

(C) Filter frames shall be manufactured housings designed for maximum 500 FPM velocity and shall provide an airtight fit with the enclosing ductwork. All joints between filter segments and the enclosing ductwork shall be gasketed or sealed to provide a positive seal against air leakage. Filter housing blank off panels shall be permanently attached to the frame, constructed of rigid materials, and have sealing surfaces equal to or greater than the filter media installed in the filter frame.

(D) Magnahelics or manometers shall be installed across all filter beds having a required efficiency of 75 percent (MERV 12) or more. When these filters are located remote from the air handling unit, monitoring of filter condition shall be provided in a staffed area or through the building control system.

(m) Steam humidifiers shall be used for humidification. Central steam shall be used only if chemical treatment is food grade. Humidifiers shall be located to prevent moisture on filters or lined ductwork. Ductwork with duct mounted humidifiers shall be stainless steel or aluminum construction and shall have a means for water removal. An adjustable high limit humidistat shall be located downstream of the humidifier to reduce the potential for condensation inside the duct. Humidifiers shall be connected to airflow proving switches that prevent humidification unless the required volume of airflow is present. All duct takeoffs shall be sufficiently downstream of the humidifier to ensure complete moisture absorption.

(n) Ducts and piping which penetrate construction intended for X-ray, MRI, RF, or other radiation protection shall not impair the effectiveness of the protection.

(o) Fire and smoke dampers shall be constructed, located, activated, and installed in accordance with the requirements of NFPA 90A, NFPA 101, and OSSC. Fans, smoke dampers, and detectors shall be interconnected so that activation of dampers will not damage the ducts. Access for maintenance shall be provided at all dampers. All damper locations must be shown on drawings. When smoke partitions are required, zones for air handling systems shall be coordinated with compartmentation insofar as practical to minimize the need to penetrate fire and smoke partitions.

(p) Systems shall be provided to exhaust chemicals and fumes that cause respiratory irritation or other hazards to workers, including laboratory processes, instrument processing rooms, radioactive processes, chemo hoods, and pharmacies. If the minimum air change standards in Table 2 do not provide sufficient air for use by hoods and safety cabinets, makeup air shall be provided to maintain the required air flow direction and to avoid depending upon infiltration from outdoors or from contaminated areas.

(q) All laboratory and pharmacy hood systems shall meet OMSC and shall meet the following general standards. (Laminar flow hoods used in clean applications are exempt from these requirements.)

(A) Have an average face velocity of 75 to 125 feet per minute or as required by the hood manufacturer, whichever is greater;

- (B) Be connected to an exhaust system to the outside that is separate from the building exhaust system;
- (C) Have a labeled exhaust fan located at the discharge end of the system outside the building with the outlet discharging vertically a minimum of 6 feet above the roof;
- (D) Have an exhaust duct system of noncombustible corrosion-resistant materials as needed to meet the planned usage of the hood; and
- (E) Be equipped with devices and alarms to alert staff of fan shutdown or loss of airflow.
- (F) If equipped with HEPA filters, have a means to alert staff when filter change is required.
- (G) Each hood that processes highly infectious or radioactive materials shall have a minimum face velocity of 90 to 110 feet per minute or as required by the hood manufacturer; shall be connected to an independent exhaust system; shall have filters with a 99.97 percent efficiency (MERV 17); and shall be designed and equipped to permit the safe removal, disposal and replacement of contaminated filters. Filters shall be as close to the hood as practical to minimize duct contamination.
- (H) Hoods that process radioactive materials shall meet requirements of the Nuclear Regulatory Commission and NFPA 801 Facilities for Handling Radioactive Materials, and discharge vertically a minimum of 10 feet above the roof of the building. Radioactive isotopes used for injections, etc., without probability of airborne particulate or gases may be processed in a "clean work bench" type hood where acceptable to the Nuclear Regulatory Commission.
- (I) Duct systems serving hoods in which strong oxidizing agents (e.g., perchloric acid) are used shall be equipped with washdown facilities. Provisions shall be made for safe removal of filters during washdown operations.
- (r) Exhaust hoods in food preparation centers shall comply with NFPA 96. Dedicated kitchen hood make-up air system intakes may be a minimum of 10 feet from kitchen hood exhaust outlets. The food preparation area may have air movement "in" during cooking and hood operation for odor control. Makeup systems for hoods shall be arranged to minimize "short circuit" of air movement and to avoid reduction in air velocity at the point of contaminant capture.
- (s) The ventilation system for medical gas storage rooms shall conform to the requirements of NFPA 99.
- (t) The space that houses ethylene oxide (ETO) sterilizers and cylinder storage shall be provided with a dedicated local exhaust system with adequate capture velocity (i.e., with a minimum capture velocity of 200 fpm) to exhaust over sterilizer door, exhaust at sterilizer drain, and exhaust at the aerator and multiple load station. The exhaust shall discharge vertically a minimum of 10 feet above the roof and shall be labeled. An audible and visual alarm shall activate in the sterilizer work area and in a continuously staffed location upon loss of airflow in the exhaust system. Relief vents for safety valves shall be provided and shall terminate outside the building. Installation shall also conform to applicable standards of the sterilizer manufacturer. Testing of installations to standards of the Department of Consumer and Business Services, Oregon Occupational Safety and Health Division shall be made before routine use occurs. Such standards are provided in OAR chapter 437, division 2.
- (u) Boiler rooms shall be provided with sufficient outdoor air to maintain combustion rates and to limit workstation temperatures.

(v) Gravity exhaust may be used, where conditions permit, for non-patient areas such as boiler rooms, central storage, etc.

(5) Plumbing and other piping systems:

(a) Plumbing fixtures:

(A) All fixtures used by medical and nursing staff and all lavatories used by patients and food handlers shall be trimmed with valves that can be operated without the use of hands (single lever devices, wrist blades, sensor operated, foot pedal operated, or similar). Blade handles used for this purpose shall not exceed 4.5 inches in length. Standard fittings are allowable on lavatories in patient toilet rooms when a second lavatory is provided in the adjacent patient room(s). In patient care areas, faucet and water closet sensors requiring electrical energy to operate shall be connected to emergency power.

(B) Clinical sinks shall be trimmed with valves that can be operated without hands. Single lever or wrist blade devices shall be permitted. Handles on clinical sink faucets shall be a minimum of 6 inches long.

(b) Potable water supply systems:

(A) Bedpan flushing devices (may be cold water) shall be provided in each inpatient toilet room, except that installation is optional in psychiatric, alcohol abuse, and other units where patients are ambulatory.

(B) Water distribution systems in inpatient facilities and in outpatient surgical facilities shall be arranged to provide for continuous hot water at each hot water outlet. Piping branches from recirculating hot water system mains to individual outlets shall not exceed 30 feet for standard faucets and 10 feet for sensor operated and low flow faucets. Hot water for showers and bathing facilities shall be at appropriate temperatures for comfortable use but shall not exceed 49°C or 120°F (see Table 4).

(c) Hot water systems: The system for heating domestic water shall have sufficient capacity to supply water at the temperatures and amounts indicated in Table 4.

(d) Drainage systems:

(A) Drain lines from fixtures in which acid wastes may be poured shall be fabricated from acid-resistant material.

(B) Sanitary and storm drainage piping shall not be installed overhead whether within the ceiling or exposed, in operating and C-section rooms, pharmacy IV admixture clean rooms, intensive care nurseries, food storage areas, central sterile supply areas, and other sensitive areas. Where overhead drain piping is unavoidable in these areas as may occur in existing facilities special provisions, such as the use of drain pans or FM 1680 approved couplings, shall be made to protect the space below from possible leakage, condensation or dust particles. If drain pans are installed for protection, the pans shall be drained to an open site, air-gap drain and shall be labeled.

(C) Floor drains and cleanouts shall not be installed in operating and C-section delivery rooms. Flushing rim type drains may be used in cystoscopic rooms, except as prohibited by rules for surgical facilities under OAR 333-535-0110(3)(d). Flushing rim valves shall not be located within the cystoscopic room, but the means of actuation may be in the cystoscopic room.

(D) Building sewers shall discharge into a community sewage system. Where such a system is not available, the facility must treat its sewage in accordance with standards of the Oregon Department of Environmental Quality and local governmental agencies having jurisdiction.

- (E) Grease interceptors for kitchens shall comply with requirements of OPSC.
- (F) Where plaster traps are used, they shall meet standards of OPSC.
- (G) Provide traps at hot lab sinks where radioactive materials are processed.
- (H) All domestic water service mains, risers, and branch mains shall have shut off valves.
- (I) Drain systems for autopsy rooms shall be designed to prevent splatter or overflow onto floors, to prevent back siphonage, and for easy cleaning and trap flushing.
- (J) Where decontamination shower areas are provided, waste containment tanks shall be provided and sized in accordance with the Hospital's Emergency Management Plan. Provisions shall be made to divert or pump the waste from the tank for appropriate disposal.
- (K) Jetted tubs shall provide for removal of jets for cleaning and for the discharge of all water within piping between uses.
- (e) Nonflammable medical gas and vacuum systems: The installation of non-flammable medical gas and vacuum systems shall comply with the requirements of NFPA 99. See Table 5 for rooms that require station outlets and inlets. Installers of medical gas systems shall meet the requirements of ANSI/ASSE Standard 6010 and verification testing agencies shall meet the requirements of ANSI/ASSE Standard 6030.
- (A) Medical gas systems verification test results certifying the medical gas and vacuum system testing required in NFPA 99 shall be documented for maintenance files and be available for inspection by Division surveyors or Authorities having Jurisdiction.
- (B) When any existing medical gas or vacuum system is altered or augmented, all the new and existing components in the immediate zone or area located upstream for vacuum systems and downstream for medical gas systems of the altered section shall be tested and certified per NFPA 99 requirements.
- (C) Each space with piped anesthetic gas and any space routinely used for administering inhalation anesthesia shall be provided with a scavenging system to vent waste gases. Gases from the scavenging system shall be exhausted directly to the outside. If the medical vacuum system is used, the gas collecting system shall be arranged so that it does not interfere with the patient's respiratory system. The anesthesia evacuation system may be a dedicated exhaust fan system with monitoring and alarming through an airflow switch or other means. Separate scavenging systems are not required for areas where gases are used only occasionally such as the emergency room, offices for routine dental work, labor, delivery and recovery rooms, etc. Cautionary comments of NFPA 99 may be especially applicable when vacuum system is being considered for scavenging of anesthetic gases.
- (D) Medical vacuum system discharge shall be located a minimum of 25 feet from all doors, windows and other openings into the building, a minimum of 25 feet above grade, a minimum of 25 feet from medical air systems intakes, and a minimum of 10 feet from designated mechanical areas and walkways.

[ED. NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060

333-535-0310

Electrical Requirements

(1) General:

- (a) All material including equipment, conductors, controls, and signaling devices shall be installed in compliance with Oregon Structural Specialty Code (OSSC), the Oregon Electrical Specialty Code (OESC), and NFPA 99 Health Care Facilities. All materials shall be listed as complying with state approved standards;
- (b) The electrical installations including, but not limited to, alarm, nurses' call, communication, and emergency generator systems shall be tested to demonstrate that equipment installation and operation is as intended and appropriate. A written record of performance tests of special electrical systems and equipment shall show compliance with applicable codes and standards. Grounding continuity, receptacles and isolated power systems shall be tested as described in NFPA 99;
- (c) Functional performance tests shall be provided for projects that include the addition or modification of major equipment and systems. These tests shall be performed to ensure electrical systems operate in accordance with the design intent and in compliance with requirements herein. Description of procedures and test results for each functional performance test shall be documented to demonstrate to the design engineer, or his or her representative, that systems operate in accordance with the design intent. Documentation shall be included in the maintenance files and be available for inspection by the Division's surveyors or Authorities having Jurisdiction. Functional performance tests shall be developed and performed for the following systems and system functions in inpatient facilities where applicable:
- (A) Emergency power systems;
 - (B) Generator fuel oil supply transfer systems including alarms;
 - (C) Fire alarm systems;
 - (D) Nurse call systems;
 - (E) Communication systems;
 - (F) Grounding systems;
 - (G) Isolated power systems;
 - (H) Receptacle continuity and grounding system tests; and
 - (I) Emergency power system load shedding controls.
- (d) When remodels occur in hospitals in which emergency electrical services branches are not divided in accordance with NFPA 99 and OESC, and less than 50 percent of an individual system is affected, the entire system is not required to be made to conform to these codes. Modifications, however, shall be done in a manner to minimize required work should the full system later be brought into conformance;
- (e) Upon completion of the electrical contract, the owner shall be furnished, and shall retain on file, a complete set of building drawings, a complete set of operating, maintenance, and preventative maintenance instructions, parts lists, and procurement information for all major electrical equipment and systems, including electrical distribution equipment, generators, nurse call equipment, smoke detection equipment, alarm systems, and arc flash labeling. Responsible operating staff shall be provided with instructions in the proper operational use of system, equipment, and controls. This information shall be available for inspection by the Division's surveyors or Authorities having Jurisdiction.
- (f) Psychiatric patient room fixtures and equipment shall be tamper resistant and shall be selected to meet the requirements of the Patient and Staff Safety Assessment. Refer to

OAR 333-535-0061 for additional requirements. Equipment shall be selected to minimize the need for maintenance within the room.

(2) Switchboards, power panels, equipment and their installation shall comply with OESC. The normal power main switchboard shall be located in an area separate from the essential electrical system equipment; in an area separate from plumbing and mechanical equipment, except equipment required to support electrical equipment; and in an area accessible only to authorized persons.

(3) Panelboards. Panelboards serving normal lighting and appliance and all critical care circuits shall be located on the same floor as the circuits they serve. Panelboards for life safety circuits may serve no more than one floor above and/or below, and the floor on which they are located. Provide labeling at fixed, major electrical equipment served by the equipment branch indicating the panel designation. New panelboards, serving patient care areas, shall not be located in corridors accessible to the general public.

(4) Lighting:

(a) Lighting shall conform to the recommended lighting standards for public buildings contained in the OSSC (Means of Egress Illumination), Illuminating Engineering Society (IES) RP-28 and RP-29. Approaches to buildings and parking lots, and all occupied spaces within buildings shall have illuminated fixtures as necessary.

(b) Approaches to buildings and parking lots shall have lighting at a minimum of 1 foot-candle to allow for the safe passage of pedestrians.

(c) Inpatients' rooms shall have general illumination, night illumination, reading illumination and exam illumination.

(A) General illumination fixtures shall be provided in each inpatient room. At least one fixture shall be connected to the emergency power system, critical branch.

(B) Night illumination fixtures shall be provided in each inpatient room to light the pathway from the room entrance to the bed and from the bed to the toilet. The night illumination fixture(s) shall be permanently installed low-intensity luminaires mounted at or below the patient bed level. Night luminaires shall be controlled at the room entrance.

(C) Reading illumination fixtures shall be provided for each patient. The patient shall be able to control the reading light without getting out of bed. Flexible light arms, if provided, shall be mechanically controlled to prevent the bulb from coming in contact with bed linen.

(D) Exam illumination fixtures and all lights positioned over the patient bed shall be designed or positioned to prevent damage from intravenous (IV) poles and traction devices when the head of the bed is raised.

(d) All light controls in patient areas shall be of the quiet operating type.

(e) Lighting for intensive care, critical care, and newborn nursery bed and crib areas shall be designed or arranged to permit staff observation of patients, but minimize glare, i.e., no downlights over patient bed areas. Provisions shall be made to allow staff to lower the light levels through switching of alternate lamps or by dimming the lighting. Refer to OAR 333-535-0041(6)(h) for lighting controls required at NICU beds.

(f) Operating and C-section delivery rooms shall have general lighting in addition to that provided by special luminaires at the surgical and obstetrical tables. Each fixed special luminaire at the table shall be connected to an independent circuit. Portable units may share circuits.

- (g) Patient care unit corridors shall have general illumination with provisions for reduction of light level at night.
- (h) Non-lensed fixtures shall not be allowed in patient care areas.
- (i) Adaptable or universal rooms shall be in accordance with the most restrictive use.
- (5) Receptacles (Convenience Outlets): See Table 6 for receptacle requirements in specific areas.
 - (a) In pediatric units, psychiatric units, emergency department waiting areas, and outpatient waiting areas receptacles shall be tamper resistant, hospital grade, safety grounding type;
 - (b) Anesthetizing locations. Each operating and C-section delivery room shall have a minimum of six independent circuits serving receptacles. Where mobile X-ray equipment requiring special electrical considerations is used, additional receptacles distinctively marked for X-ray use shall be provided. (See OESC for receptacle requirements when capacitive discharge or battery operated mobile X-ray units are used.);
 - (c) Patient areas. Each patient room shall have duplex grounding type receptacles located as follows: One on each side of the head of each bed, at least one of which shall be connected to the emergency electrical system critical branch; one for the motorized bed; and one on each other wall. A separate receptacle shall be provided for television, if used. Receptacles may be omitted from exterior walls where construction would make installation impractical. Adaptable or universal rooms shall be in accordance with the most restrictive use.
 - (d) All critical care areas, as defined in OESC and NFPA 99, including pediatric intensive care, trauma, and resuscitation, shall have at least four duplex outlets within 6 feet of the head of each bed, crib, or bassinet, all of which shall be connected to the emergency electrical system critical branch. Additional outlets (which may be shared) shall be available at the head of each bed;
 - (e) Resuscitation, LDRP, and LDR rooms shall have receptacles at the bed as required for patient rooms and shall have additional receptacles at the crib/bassinet as required for normal newborn nurseries.
 - (f) Patient areas with renal dialysis water and waste connections shall be provided with GFI protection.
 - (g) Corridors. Duplex grounded receptacles for general use shall be installed approximately 50 feet apart in all corridors and within 25 feet of the ends of corridors. Receptacles in pediatric unit corridors shall be hospital grade, tamper resistant, safety grounding type. At least one single polarized receptacle marked for use of X-ray only shall be installed in corridors of inpatient areas. Where capacitive discharge or battery-powered X-ray units are used in lieu of the portable electrically powered type, separate polarized receptacles are not required.
 - (h) Provide duplex outlets for emergency resuscitation carts, connected to the critical branch of the emergency system.
- (6) Equipment Installation in Special Areas:
 - (a) Anesthetizing locations. All electrical equipment and devices, receptacles and wiring shall comply with applicable sections of NFPA 99 and OESC.
 - (b) X-ray installation. Fixed and mobile X-ray equipment installations shall conform to OESC.
 - (c) Ground fault protection for personnel shall be provided as follows:

(A) Individual 125 volt ground fault circuit interrupter receptacles shall be provided when located adjacent to any sink or within 6 feet of any shower or tub;

(B) Ground fault circuit interrupter protection shall be provided for all 15 or 20 amp, 125 volt receptacles located within 6 feet of kitchen or other food preparation area sinks; and

(C) When ground fault circuit interrupters are used in critical care areas, provisions shall be made to ensure that other essential equipment is not affected by activation of an interrupter.

(d) In inpatient care areas, electronic faucets and water closets requiring electricity to operate shall be connected to the critical or equipment branch of the emergency system.

(e) Domestic hot water systems in inpatient facilities shall be served by the equipment branch of the emergency system and a minimum of one kitchen refrigerator and one kitchen freezer shall be served by the equipment branch of the emergency system.

(f) All patient care-related telecommunications and information systems shall be powered from the essential electrical system. If installed, electronic surveillance systems including patient location, video/audio monitoring, and infant abduction prevention systems shall be served by the essential electrical system.

(7) Nurses' call system requirements for inpatient facilities and outpatient surgical facilities:

(a) General. Each patient room including diagnostic and treatment areas shall be served by at least one calling station for two-way voice communication, except as exempted elsewhere in this chapter. Each such bed shall be provided with a call button. Two call buttons serving adjacent beds may be served by one calling station. Calls shall activate a visible signal in the corridor at the doors to patient's rooms and in all nurses' work stations including clean utility rooms, soiled utility rooms, medication rooms, and the nursing station of the nursing unit. In multi-corridor nursing units, additional visible signals shall be installed at corridor intersections. All nurses' call stations shall be electronically supervised to indicate when connecting devices are inoperable. Nurses' calling systems that provide two-way voice communication shall be equipped with an indicating light at each calling station that lights and remains lighted as long as the voice circuit is operating.

(b) Emergency call system. A nurses' call emergency system shall be provided for each inpatient toilet, bath, sitz bath, shower room, imaging suite, and renal dialysis toilet room, except as exempted elsewhere in this chapter. This system shall be usable by a collapsed patient lying on the floor. Inclusion of a pull cord will satisfy this standard. The emergency call system shall be designed so that all signal lights will remain lighted until turned off at the patient's calling station. Provisions for emergency calls will also be needed in outpatient and treatment areas where patients may be subject to incapacitation, such as dressing areas and restrooms.

(c) Intensive care. In areas such as intensive care, recovery and pre-op where patients are under constant visual surveillance, the nurses' call system may be limited to a bedside button or station that activates a signal readily seen from the control station.

(d) Nurses' emergency. A calling station that may be used by nurses to summon assistance from other areas for non-life threatening situations shall be provided in each C-section, recovery, emergency examination or treatment area, and in intensive care units, nurseries, special procedure rooms, stress test areas, cardiac catheterization, out-patient surgeries, special procedure rooms, endoscopy, colonoscopy, bronchoscopy, emergency

department triage/intake areas, and group areas for psychiatric patients. The call station may be located at the area nurse station in intensive care, nursery, recovery, and emergency department areas. This system shall activate a visual and audible signal at all nurse work areas in the unit and at an additional nurse station in a staffed area.

(e) In critical care, post anesthesia care unit recovery, and inpatient pre-op areas the nurse call system shall include provisions for an emergency code resuscitation alarm to summon assistance from outside the unit.

(f) Each operating room shall be provided with a system for emergency communication with the surgical control station that can be operated without the use of the hands, but which is not foot operated. (Refer to OAR 333-535-0110(3)(a))

(g) In non-invasive and non-critical care areas with CCTV and intercom to monitor the patient, such as radiation therapy and tomotherapy, a patient call station is not required.

(h) Nurse call stations are not required in psychiatric patient care rooms, but if provided, all hardware shall have tamper resistant fasteners and provisions shall be made for the easy removal or covering of call button outlets.

(8) Emergency Electric Service:

(a) General. An emergency source of electricity shall be provided and connected to certain circuits for lighting and power during an interruption of the normal electric supply in accordance with NFPA 99, NFPA 110, and OESC.

(b) Emergency electric services shall be provided to all services that must continue to function during any failure of the normal power source as required in NFPA 99 and OESC, including fire pump if installed. Sufficient fuel/power to operate the emergency electric services for a minimum of 96 hours shall be provided for inpatient facilities. The fuel system shall include a low level day tank alarm, transfer pump flow switch alarm, or other method to detect an interruption of flow between the main fuel tank and the day tank;

(c) Exhaust systems for internal combustion engines shall be of the critical silencer type and be installed to minimize objectionable noise to patient areas. Where a generator is routinely used for reduction of peak loads, protection of patient areas from excessive noise may become critical.

(d) Electrical plans shall include information indicating size of essential electrical service and load served by automatic transfer switch(es). Plans or specifications for facilities utilizing only one transfer switch shall include load calculation summaries showing the volt amp loads on the transfer switch.

(9) Fire Alarm Systems: All health care facilities shall be provided with fire alarm systems in accordance with the Authorities having Jurisdiction. Special attention shall be given to the use of fire alarm appurtenances in anesthetizing locations and control of air handling systems serving anesthetizing and infectious isolation areas.

Stat. Auth.: ORS 441.060

Stats. Implemented: ORS 441.060